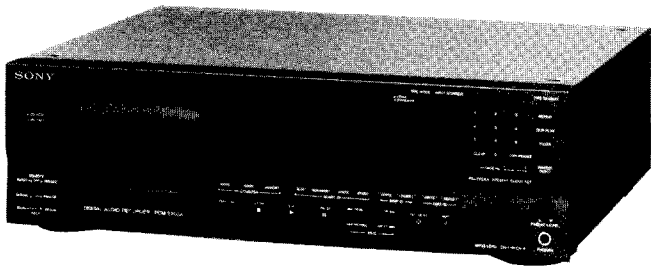
PCM-2700A

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model



Model Name Using Similar Mechanism	PCM-2700
Tape Transport Mechanism Type	DATM-51

TABLE OF CONTENTS

MICROFILM

DIGITAL AUDIO RECORDER

SONY®

SECTION 1
SERVICING NOTES

The built-in clock for date recording function is backed up by a lithium battery. In servicing, take care of the following points :

- The clock is reset if peripheral printed patterns of lithium battery (BATT01) or clock IC (IC712) are shorted.
- The clock is reset if lithium battery power connector (CN573) is disconnected when removing the front panel.

In this case, confirm the backup condition and re-set the clock following the instruction on page 23.

NOTE ON LITHIUM BATTERY

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the equipment manufacturer. Discard used batteries according to manufacturer's instructions.

ADVARSEL !
Lithiumbatteri – Eksplosionsfare ved fejlagtig håndtering.
Udskiftning må kun ske med batteri
af samme fabrikat og type.
Lever det brugte batteri tilbage til leverandøren.

ADVARSEL

Lithiumbatteri – Eksplosjonsfare.
Ved utskifting benyttes kun batteri som
anbefalt av apparatfabrikanten.
Brukt batteri returneres apparatleverandøren.

VARNING

Explosionsfara vid felaktigt batteribyte.
Använd samma batterityp eller en ekvivalent
typ som rekommenderas av apparattillverkaren.
Kassera använt batteri enligt fabrikantens
instruktion.

VAROITUS

Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

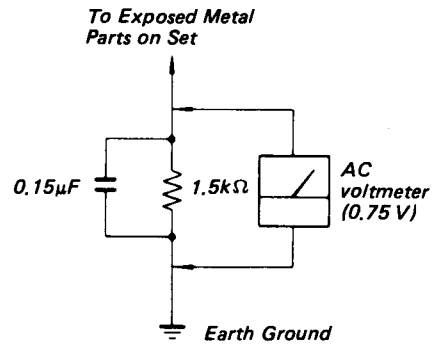


Fig. A. Using an AC voltmeter to check AC leakage.

8-3 Specifications

General

Power requirements	USA/Canada model: 120 V AC ±10 %, 60 Hz Europe/UK model: 220 to 240 V AC ±10 %, 50/60 Hz
Power consumption	44 W
Operating temperature	5°C to 40°C (41°F to104°F)
Storage temperature	–20°C to +55°C (–4°F to131°F), without moisture condensation
Weight	10.2 kg (22 lb 8 oz)
Dimensions	430 x 130 x 350 mm (W/H/D) (17 x $5^{1}/_{8}$ x $13^{7}/_{8}$ inches), without the rack mount adaptor

Digital audio input and output section

Number of record channel	2 channels
Sampling frequency	48 kHz, 44.1 kHz, 32 kHz
Quantization	16-bit linear/12-bit non-linear
Error correction	Double-encoded Reed Solomon code
Modulation system	8-10 modulation

Tape recording section

Format	IEC digital audio tape cassette system DAT for professional use
Head	Rotary head (4-head) (REC/PB X2, monitor X 2)
Drum rotation	2000 rpm (standard recording)
Tape speed	8.15 mm/sec. (standard mode) 4.075mm/sec. (long-play mode)
Track pitch	13.6μm
Tape	Digital audio tape
Recording time	120 minutes (standard mode) 240 minutes (long-play mode) (with tape type DT-120)

Mechanical section

Fast-forward/rewind	Within 60 seconds (with tape type DT-120)
Rise time	1.0 seconds or less (pause → play) 2.0 seconds or less (stop → play)
Searching speed	150 times max. normal playback speed
Cue/review speed	Approx. ±3, ±8 times normal playback speed

Input/output interface

Analog input

Connector	XLR-3-31
Reference level	+4 dBs (factory set)
Maximum level	+24 dBs
Input impedance	Approx. 10 kilohms, balanced
Adjustable range	–12 dBs to +8 dBs

Analog output

Connector	XLR-3-32
Reference level	+4 dBs (load impedance 10 kilohms) (factory set)
Maximum level	+24 dBs
Output impedance	Approx. 150 ohms, balanced
Load impedance	More than 600 ohms
Adjustable range	–12 dBs to +8 dBs

Digital input (AES/EBU jacks)

Connector	XLR-3-31
Format	AES/EBU (with transformer)
Input impedance	110 ohms, balanced
Lock range	±0.1 % (each sampling frequency)

Digital output (AES/EBU jacks)

Connector	XLR-3-32
Format	AES/EBU (with transformer)
Output impedance	20 ohms, balanced
Load impedance	110 ohms

Digital input (COAXIAL jacks)

Connector	RCA phono jack
Format	IEC958 digital audio interface (Broadcasting studio use/consumer use)
Input impedance	75 ohms, unbalanced
Lock range	±0.1 % (each sampling frequency)

Digital output (COAXIAL jacks)

Connector	RCA phono jack
Format	IEC 958 digital audio interface (Broadcasting studio use)
Output impedance	75 ohms, unbalanced
Load impedance	75 ohms

Headphones output

Connector	Stereo standard jack
Reference level	–27 dBs (load impedance 8 ohms) (PNONE LEVEL: maximum)
Output impedance	Approx. 100 ohms
Load impedance	More than 8 ohms

This section is extracted from instruction manual.

REMOTE (37 P)

Connector	D-SUB 37-pins (female)
Format	Parallel
Input level	L; ground short (less than 100 ohms) H: open collector (high impedance)
Output level	L: less than 0.8 V (Imax.: 25 mA) H: open collector (10 kilohms pull-up)
+5 V output	Imax. 100 mA

REMOTE (8 P)

Connector	DIN 8-pins (female)
Format	Parallel
Input level	L; ground short (less than 100 ohms) H: open collector (high impedance)
Output level	L: less than 0.8 V (Imax.: 25 mA) H: open collector (10 kilohms pull-up)
+5 V output	Imax. 100 mA

Audio section

Frequency characteristic	
	20 Hz to 20 kHz, ± 0.5 dB (standard mode)
	20 Hz to 14.5 kHz, ± 0.5 dB (long-play mode)
Signal-to-noise ratio	More than 90 dB (with A-weight filter)
Total harmonic distortion	
	Less than 0.05 % (standard mode) Less than 0.3 % (long-play mode) (at reference level, 1 kHz)
Wow and flatter	Below measurable limit (± 0.001 %, W. Peak)
Signal delay time (RAW mode)	
	Approx. 120 milliseconds (standard mode)
	Approx. 240 milliseconds (long-play mode)

Note:
The reference level is the level at –20 dB from the full bit on the peak level meter scale.

Accessories

Wireless remote commander (RM-D2700)

Remote control system	Infrared pulse control
Power requirements	3 V DC, with two size AA (R6) batteries
Dimensions	Approx. 63 x 19 x 175 mm (w/h/d) ($2^1/_2$ x $^3/_4$ x 7 inches)
Weight	Approx. 130 g (4 oz) incl. batteries

Supplied accessories
Wireless remote commander RM-D2700 (1)
Sony batteries SUM-3 (NS) (size AA (R6)) (2)
The seat for the parallel remote (1)
AC power cord (1)
Rack mount adaptor (2)
Screws (M3 x 28) (4)
Screws (M5 x 12) (4)
Decorative washers (4)
Operation manual (1)
Warranty card (1) (USA/Canada model only)

Accessories recommended (Optional)
Parallel remote commander RM-D7100
Cleaning cassette DT-10CL

Design and specifications are subject to change without notice.

1-2 Features

(1) Digital Audio Recorder Compatible With DAT Format Standard

Audio signals are converted into 16-bit quantized digital data for recording and playback realizing pure reproduction with virtually no degradation in sound quality. Moreover, the basic tape format is compatible with consumer-use DAT equipment.

(2) Professional-use Digital I/O

Digital I/O terminals conform to the professional AES/EBU format standard (balanced type, XLR) and COAXIAL IEC-958 format (unbalanced type, phono jack). The COAXIAL IN and OUT terminals accept professional format (IEC 958-TYPE I*). The digital input terminals also accept consumer format (IEC 958-TYPE II*) signals for digital recording from consumer-use equipment. Therefore, the digital recording from the consumer-use DAT deck to this unit can be available by connecting to the COAXIAL IN and OUT terminals. However, the digital recording from this unit to the consumer-use DAT deck can not be available.

(3) Wide-range Analog I/O Level Adjustment

Rear panel signal level adjustment function for the balanced type (XLR) analog I/O jacks covers a wide adjustment range from professional-use to consumer-use levels.

(4) 4-Head, 4-DD Mechanism

The PCM-2700A is the first digital audio recorder in its class to employ a four-head system enabling monitoring of the playback signal during recording (RAW function). Moreover, all four tape transport motors offer direct-drive operation for improved tape transport stability.

(5) Compatible With Various Sampling Frequencies (Fs)

Allows recording and playback in both standard play (SP) mode and long play (LP) mode compatible with consumer-use equipment. Analog recording is possible at sampling frequencies of 48 kHz (SP), 44.1 kHz (SP) and 32 kHz (LP), and digital recording is possible at sampling frequencies of 48 kHz (SP), 44.1 kHz (SP) and 32 kHz (SP/LP). Playback is possible at all frequencies and modes.

*** Note**

"TYPE I" and "TYPE II" stand for the followings:
INTERNATIONAL STANDARD IEC958 (Digital audio interface)
TYPE I: Channel status application for "Broadcasting studio use"
TYPE II: Channel status application for "Consumer use"

(6) Remote Control Operation

Wireless remote control is possible using the supplied RM-D2700 remote commander, and wired remote control is possible using the optional RM-D7100 remote controller.

(7) Various Sub codes and Search Functions

In addition to the Start ID, Skip ID and End ID, other sub codes such as the absolute time and program number can be recorded in and read from the tape's subcode area to provide a wide variety of convenient DAT search functions.

(8) Built-in Date Function

A dedicated built-in clock is used to automatically record the date (year/month/day), day of the week, and time (hour/minute/second) in the tape's subcode area, allowing confirmation of the date and time of recording during playback.

(9) Multi Display Provides Quick Access to Many Types of Information

In addition to displaying the program number and various types of time/counter data, this display is provided with features including a 29-segment peak level meter and a 0.1 dB-step peak margin indicator.

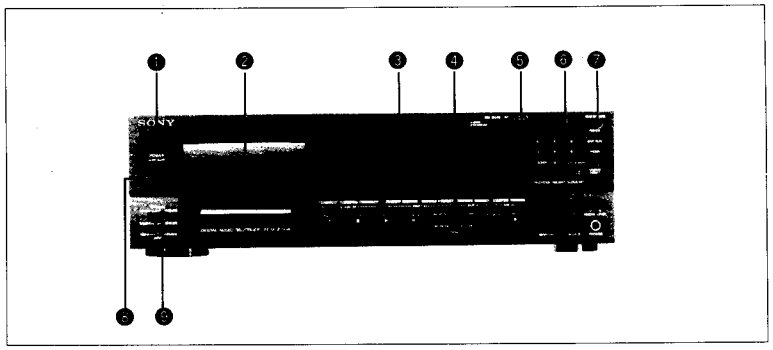
(10) Rack Mounting Compatibility

Use of the supplied adapter allows mounting in a standard 19" rack.

(11) Fader Start Compatibility

With the REMOTE (8P, parallel) terminal on the rear panel, the fader start function can be available.

2-1 Front Panel



❶ POWER switch
Turns the power on and off.

❷ Cassette compartment
Insert a cassette with the window side up and the safety tab facing you.

❸ Display window

❹ ID indicators
Display which ID button is pressed.

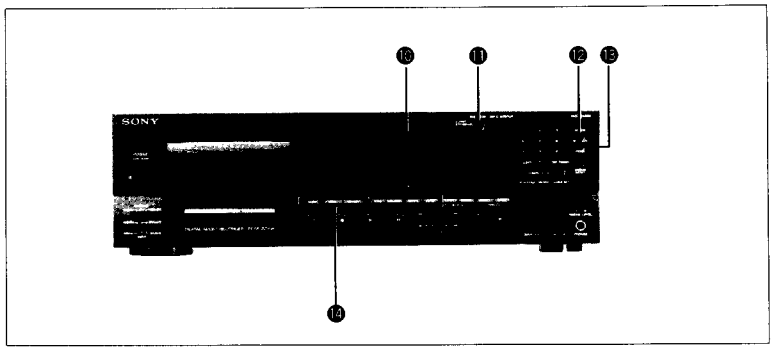
❺ INPUT MONITOR switch and indicators
Switch the output signals from the ANALOG OUT jack, DIGITAL OUT jack and PHONES jack during recording.
In the INPUT mode, the signal being input is output.
In the REPRO mode, the recorded signal is output.
During playback, the REPRO mode is selected automatically.

❻ Music select buttons
Numeric buttons (0–9): Designate the desired program number to be played back before starting playback.
CLEAR: Use to cancel the program number which has been mistakenly entered.

❼ TIME SEARCH
Press to search for the position of the tape you want to listen to by using the absolute time.

❽ Remote sensor
Receives the signal from the wireless remote commander.

❾ REMOTE switch
Switches between the supplied wireless remote commander and optional wired remote commander (REMOTE (37P)/REMOTE (8P)).



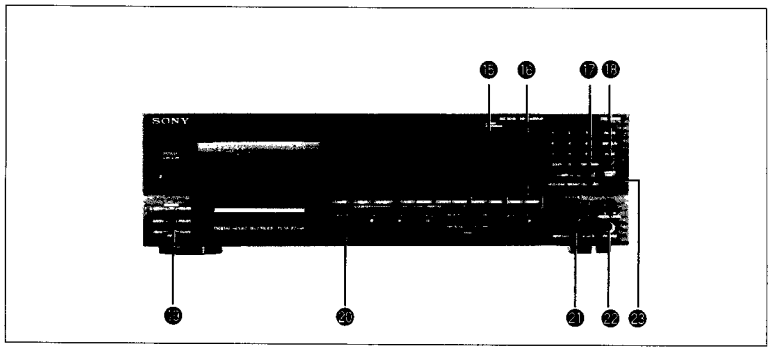
❿ START ID buttons
AUTO: Press to turn on and off the AUTO indicator. When the AUTO indicator is lit, the start ID will automatically be written during recording. The leading edge of the signal level for ANALOG input or U-bit of the interface for COAXIAL DIGITAL input is detected and start ID is automatically written.
RENUMBER: Press to renumber all programs on the tape. When only the start IDs are written, pressing this button will insert the proper program numbers beginning with "1". The tape will rewind and start from the beginning to accomplish this function.
WRITE: Press to write the start ID at the desired point during recording or playback.
ERASE: Press to erase a start ID. When a start ID and a program number are written on the tape, both codes are simultaneously erased by pressing this button.

⓫ REC MODE selector
Normally set to STANDARD.
When this selector is set to LONG, you can record analog input signals or digital signals with 32 kHz in the long-play mode.

⓬ REPEAT button
Press to play a desired portion repeatedly. Each time you press the button, the indication changes as follows: REPEAT 1 → REPEAT ALL → off

⓭ SKIP PLAY button
Press to activate the skip ID code function. The portion of the tape previously marked will be skipped.

⓮ COUNTER buttons
MODE: Selects the counter display in the display window among the linear counter (tape running time), absolute time, elapsed time of the selection, and total remaining time of tape. Each time you press the button, the display changes sequentially.
RESET: Resets the linear counter to "0M 00S".
MEMORY: Press to search for the position of the tape you want to listen to (Memory play, Memory stop).



⑮ SKIP ID buttons
WRITE: Press at the beginning of the portion you may wish to skip later. A skip ID will be written from the point where you pressed this button.
ERASE: Press to erase the nearest skip ID which is before the current position.

⑯ END ID buttons
WRITE: Press to write the ID signifying the end of playback or recording.
ERASE: Press to erase the end ID.

⑰ COPY PROHIBIT button
Press to write the copy prohibit code on the tape so that the COPY PROHIBIT indicator appears on the display.

⑱ FADER button
Press to fade in or fade out during recording or playback.

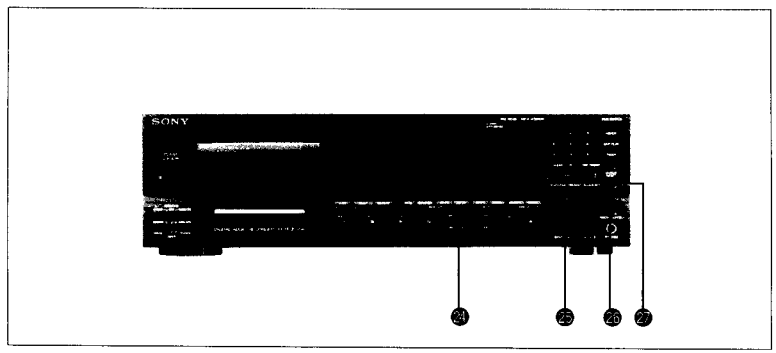
⑲ INPUT selector
Set according to the signal to be recorded.
ANALOG: Selects when recording from the equipment connected to the ANALOG IN jacks. In this mode, the sampling frequency of 48 or 44.1kHz is also selected.
DIGITAL: Selects when recording from the equipment connected to the DIGITAL (COAXIAL, AES/EBU) IN jacks.

⑳ ⏏ (OPEN/CLOSE) button
Press to open or close the cassette compartment.

㉑ INPUT LEVEL control
Adjust the recording level for the analog input signals. The outer knob controls the CH 1(L) level and the inner knob the CH 2(R) level. The knobs can be adjusted together. Normally set to the 10 (MAX) position.
When recording digital signals, it is not necessary to adjust the recording level.

㉒ PHONES jack

㉓ CLOCK SET button
Press to adjust the time of the clock built in this unit.
In this mode, The COPY PROHIBIT button and the 0 button function as the + and – buttons respectively.



㉔ Tape operating buttons
■(STOP): Press to stop recording or playback.
►(PLAY): Press to play back the tape.
● (REC): Press to set the unit to record-pause mode. After pressing this button, press **II** or **►**.
II (PAUSE): Press to stop for a moment during recording or playback. To restart recording or playback, press this button again or press **►**.
If the unit is left in the pause mode for about 10 minutes, it will automatically be released and the deck will enter the stop mode. To restart recording or playback from the stop mode, press REC or **►** respectively.
O (REC MUTE): Inserts a sound-muted portion (space).
I◄◄(PREVIOUS)/►►I(NEXT) (AMS): Press to locate the beginning of the selection during the playback.
◄◄(REW)/►►(FF): In the stop mode, press to rewind/fast-forward the tape. During playback, press to rewind or fast-forward the tape while listening to the sound.

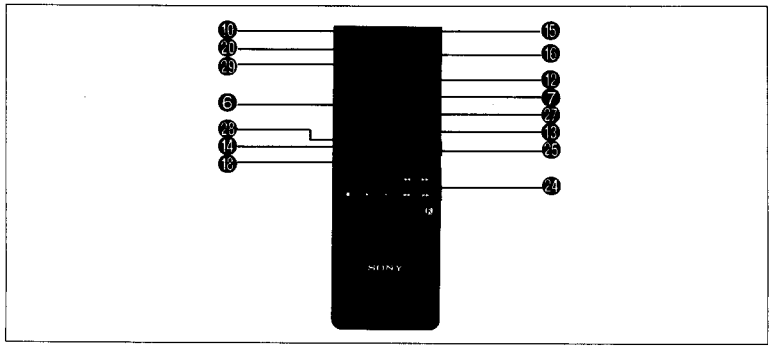
㉕ DATE button
RECORDED: Press to display the recording day of the tape being played.
PRESENT: Press to display the current time. Each time the RECORDED or PRESENT button is pressed, year, month, and day display or time, minute and second display is switched respectively.

㉖ PHONE LEVEL control
The PHONE LEVEL control adjusts the headphones volume level.

㉗ MARGIN RESET button
Press to reset the margin of peak level.

2-2 Remote Commander

2-2-1 Wireless Remote Commander (Supplied)



Buttons with the same numbers as those on the main unit have the same function.

The following functions are operated only with the remote commander.

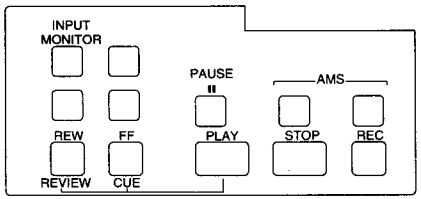
25 MUSIC SCAN button
Use this feature to listen to the beginning of each selection successively.

26 DISPLAY MODE button
Change the display mode.

Note
When using the wireless Remote Commander, set the REMOTE switch on the front panel to the WIRELESS position.

2-2-2 Wired Remote Commander (Optional)

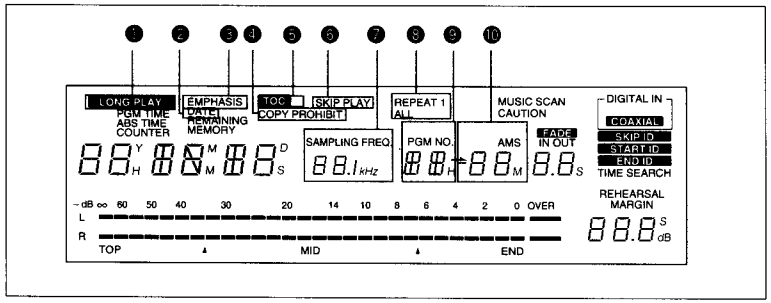
With the supplied Remote Commander seat, you can also use the optional wired Remote Commander (RM-D7100)

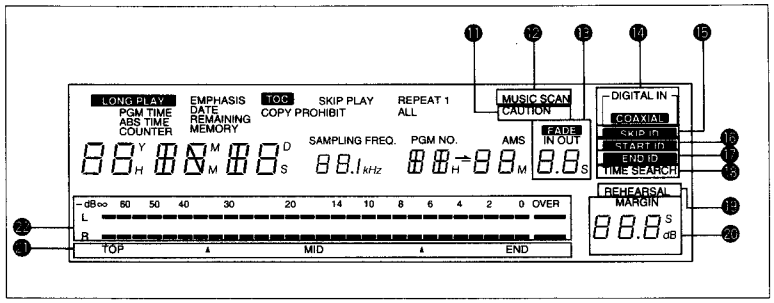


Only the functions of "1 INPUT MONITOR button" and "2 Tape operation buttons" (Except for O (record muting) button can be operative with this wired Remote Commander.
When the PLAY, REC or PAUSE button is pressed or the INPUT MONITOR switch is set to the INPUT position, the indicators light respectively. Other buttons do not function.

Note
When using the wired Remote Commander, set the REMOTE switch on the front panel to the WIRED position.

2-3 Display Window





❶ LONG play mode indicator
Lights when recording or playback is being performed in the long play mode.

❷ DATE indicator
Lights when the RECORDED button is pressed to display the recording day of the tape being played. Goes off when the PRESENT button is pressed to display the current time.

❸ EMPHASIS indicator
Lights when a tape recorded with emphasis is played back, or when recording from a digital signal on which emphasis is applied. The emphasis function reduces the noise of the high frequency level by boosting the high frequency level during recording (Pre-emphasis function) and by lowering it during playback (De-emphasis function).
This unit incorporates only the de-emphasis circuit. You can play or record the emphasized signal but newly applying emphasis cannot be performed.

❹ COPY PROHIBIT indicator
Lights when recording the digital signal with the copy prohibit code.

❺ TOC (Table Of Contents) indicator
When a pre-recorded DAT cassette tape with TOC is played back, this indicator will light.

❻ SKIP PLAY indicator
When this indicator is lit during playback, the portion marked by the skip ID is skipped and playback continues from the next start ID.

❼ SAMPLING FREQ. (Sampling frequency) indicator
Indicates the sampling frequency (48 kHz, 44.1 kHz or 32 kHz) during playback or recording.

❽ REPEAT indicators
REPEAT 1: Lights when a desired selection is played back repeatedly.
REPEAT ALL: Lights when all the selections are played back repeatedly.

❾ PGM NO. indicator
Shows the program number of the selection being played.

❿ AMS (Automatic Music Sensor) indicator
Show the number of selections to be skipped ahead or behind in the AMS operation. When designating a selection directly by the numeric button and the ► button, the display shows the program number of the target selection while the selection is being searched for.

⓫ CAUTION indicator
Lights when moisture condensation occurs. If this happens, the deck stops functioning automatically. (See page 8-1.)

⓬ MUSIC SCAN indicator
Lights after the MUSIC SCAN button on the wireless remote commander is pressed to listen to the beginning of each selection successively.

⓭ FADE IN/OUT indicator
FADE IN: Blinks when recording or playback fades in.
FADE OUT: Blinks when recording of playback fades out.

⓮ INPUT selector indicator
The DIGITAL IN COAXIAL indicator lights when the INPUT selector is set to the DIGITAL position and the COAXIAL-AES/EBU selector is set to the COAXIAL position. The DIGITAL IN indicator lights when the INPUT selector is set to the DIGITAL position and the COAXIAL-AES/EBU selector is set to the AES/EBU position.
No indicator lights when the INPUT selector is set to the ANALOG position.

⓯ SKIP ID indicator
Lights when writing or erasing a skip ID code or when the skip ID is detected during playback.

⓰ START ID indicator
Blinks when writing (for 9 or 18 seconds) or erasing a start ID code, and lights when the start ID is detected during playback.

⓱ END ID indicator
Blinks when writing (for 9 or 18 seconds) or erasing a end ID code, and lights when the end ID is detected during playback.

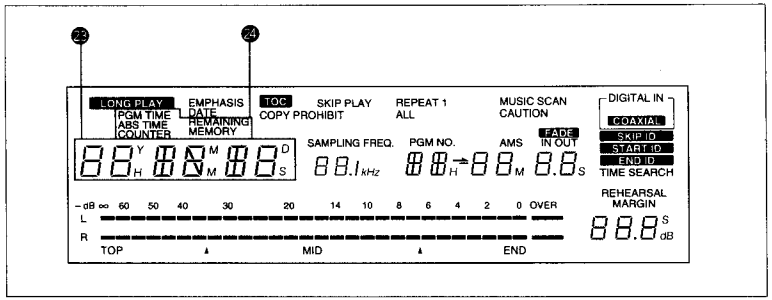
⓲ TIME SEARCH indicator
Lights when searching the desired position of a tape by using the absolute time.

⓳ REHEARSAL indicator
Lights while the rehearsal function is activated (page 5-6).

⓴ MARGIN indicator
Shows how much margin there is between the peak level of input audio signal and 0 dB.

㉑ Frequency map indicator
Bars indicating the sampling frequencies with which the tape was recorded appear on the peak level meters. (Refer to page 6-4.)

㉒ Peak level meters
Indicate the peak value of the audio signal being recorded when the INPUT MONITOR switch is set to INPUT or the peak value of the audio signal recorded on the tape when the INPUT MONITOR switch is set to REPRO.



Time indicator
Indicates the tape running time, absolute time, elapsed time of the current selection, remaining time or recording day. Each time the COUNTER MODE button is pressed, the display is changed.

REMAINING (remaining time):
Lights when the counter shows the remaining time of the tape.

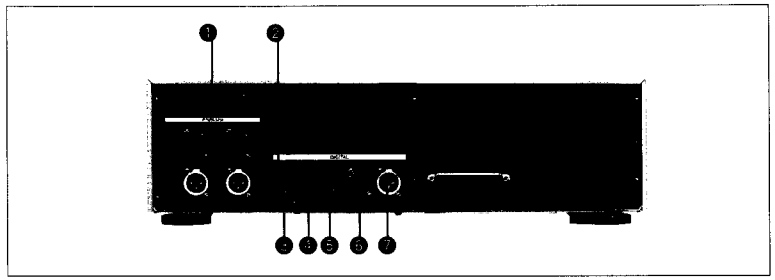
PGM TIME (program time):
Lights when the counter shows the elapsed time of the current selection.
ABS TIME (absolute time) indicator:
Lights when the counter shows the elapsed time from the beginning of a tape.
COUNTER indicator:
Lights when the counter shows the tape running time.
MEMORY indicator:
Lights when the MEMORY function can be performed in the COUNTER mode.

To turn off the display window
When the power is turned on, the display window also is turned on. During recording or playback, all display or some parts of the display can be turned off.
Each time the DISPLAY MODE button on the Wireless Remote Commander is pressed, the indicators change as follows:

Normal indicators ←
↓
Peak level meters and margin indicators go off.
↓
All the indicators go off.
↓
(back to Normal indicators)

To change the brightness of the display window
While pressing COUNTER MODE, press one of the numeric buttons 1, 2 and 3. The greater number pressed, the darker the display window becomes.

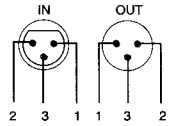
2-4 Rear Panel



ANALOG IN jacks (CH 1 (L)/CH 2 (R)) (XLR type connector)
For analog audio signal input.

ANALOG OUT jacks (CH 1 (L)/CH 2 (R)) (XLR type connector)
For analog audio signal output.

1	GND
2	HOT
3	COLD



COAXIAL DIGITAL IN jack (Phono jack)
For digital audio input of professional-use digital signal (IEC 958-TYPE I).
Consumer-use digital audio signal (IEC 958-TYPE II) can also be input.

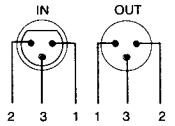
COAXIAL DIGITAL OUT jack (Phono jack)
For digital audio output of professional-use digital signal (IEC 958-TYPE I).

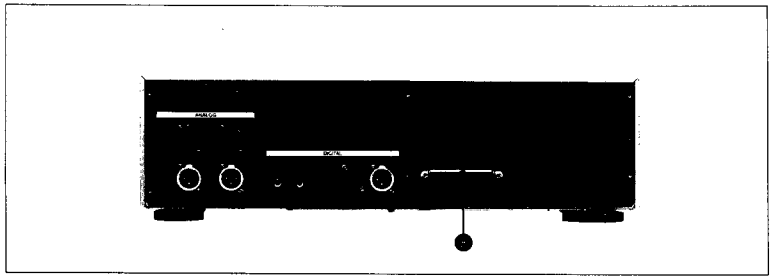
COAXIAL-AES/EBU selector
When the selector is set to the COAXIAL or AES/EBU position, the COAXIAL or AES/EBU IN and OUT terminals are selected respectively.

AES/EBU DIGITAL IN jack (XLR type connector)
For professional-use digital audio signal (AES/EBU format) input.

AES/EBU DIGITAL OUT jack (XLR type connector)
For professional-use digital audio signal (AES/EBU format) output.

1	GND
2	HOT
3	COLD

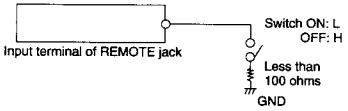




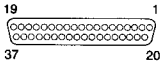
⑩ REMOTE (37 P) jack
37-pin D-SUB jack for Wired Remote Commander. Connect to the optional Wired Remote Commander (RM-D7100).

Outputs L: Less than 0.8 V (25 mA ≧ I max)
H: Open collector (+ 5 V, 10 kilohms, pull-up)
Inputs L: GND short (Less than 100 ohms)
H: Open collector (High impedance)
+5 V output:
0.1 A max.

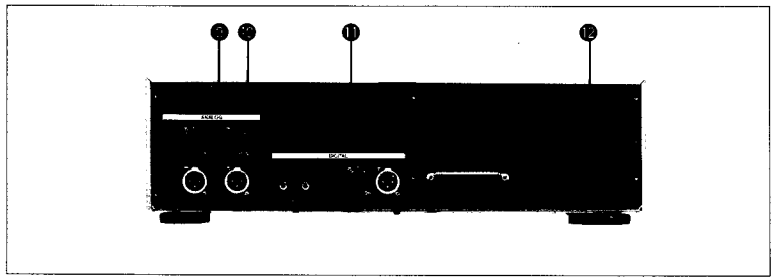
Note
Only the following signal can be input to the REMOTE jack.



Pin number



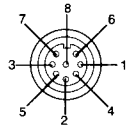
Pin NO.	Signal	Pin NO.	Signal
1	GND	20	GND
2		21	L-STOP COMMAND IN
3		22	L-FF COMMAND IN
4	L-PLAY STATUS OUT	23	L-PLAY COMMAND IN
5		24	L-REW COMMAND IN
6	L-STANDBY (PAUSE) STATUS OUT	25	L-STANDBY (PAUSE) COMMAND IN
7	L-INPUT MONITOR STATUS OUT	26	L-INPUT MONITOR COMMAND IN
8	L-REC STATUS OUT	27	L-REC COMMAND IN
9		28	L-ID NEXT (AMS) COMMAND IN
10		29	L-ID PREVIOUS (AMS) COMMAND IN
11			
12		30	
13		31	
14		32	
15		33	
16		34	
17		35	
18		36	
19	+ 5V OUT	37	



⑨ REMOTE (8P) jack
Connect to the fader or switch box.
Note
When the REMOTE (8P) jack is connected, set the REMOTE switch on the front panel to the WIRED position.

⑧ MODE selector
Selects the command mode of the pin Nos. 1 and 2 of the REMOTE (8P) jack (DIN plug).

Pin number



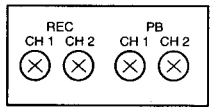
Signal

Pin No.	MODE selector	
	PLAY	PLAY/STOP
1	L-PLAY COMMANDE IN	L-PLAY/H-STOP COMMAND IN
2	L-STOP COMMAND IN	INNER CONNECTION (NO OPERATION)
3	NC	←
4	L-PLAY STATUS OUT	←
5	L-STOP STATUS OUT	←
6	NC	←
7	+5 V OUT	←
8	GND	←

NC. No Connection

- The electrical specification on input/output signal of the REMOTE (8P) jack is the same as that of the REMOTE (37P) jack.
- The L-PLAY STATUS OUT mode at pin No. 4 of the REMOTE (8P) is slightly different from that of the REMOTE (37 P) jack.
See " Fader Start" on page 6-8 for the details.

⑪ RECORD/PLAYBACK controls (Level control)
Remove the cover on the rear panel so that the level of recording input/playback output in each channel can be adjusted with the blade screwdriver (–).

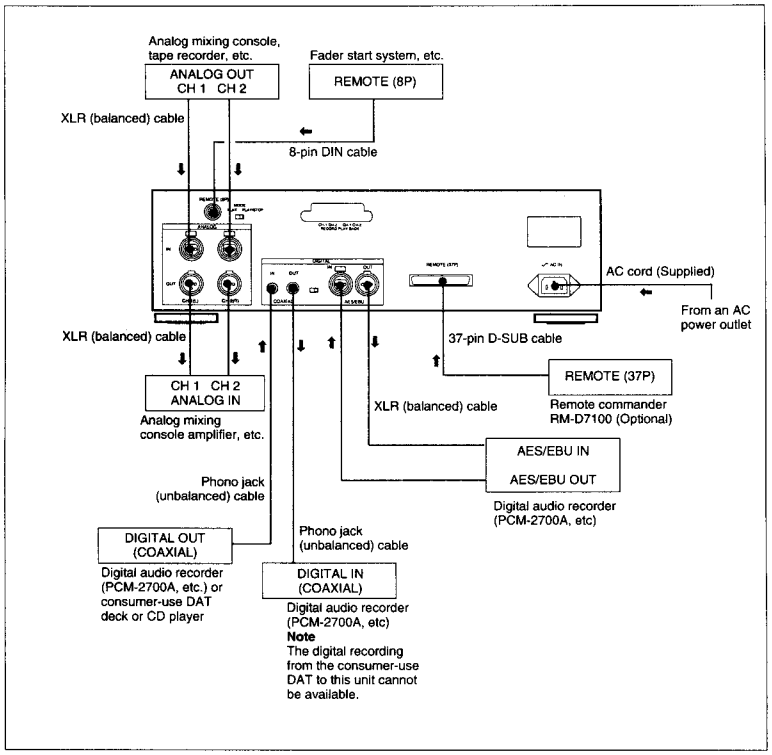


⑫ AC IN inlet
To be connected to the supplied AC power cord.

3-2 Connection

Notes on connection

- Before connecting the unit, turn off the power switch.
- The cable connectors should be fully inserted into the jacks. Loose connection may cause hum and noise.



3-3 Preparation

3-3-1 Clock Setting

This unit employs a built-in clock to keep track of the current date and time. Once you set the date and time, this information will be recorded on the tape along with the audio signal during recording. This function is very convenient because it allows you to check when the tape was recorded when playing the tape later.

Setting the date and time

Example: Setting the clock to 10:30 a.m., July 4, 1993 (Sunday)

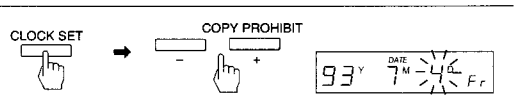
Setting the date

1 Display the current date.

2 Set the year.

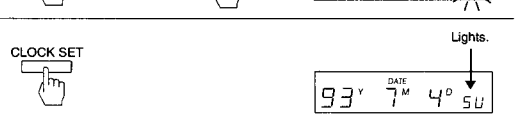
3 Set the month.

4 Set the day.



5 Set the day of the week.

6 Complete the setting procedure.

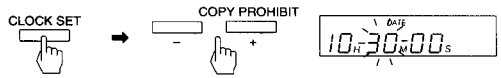


Setting the time

1 Display the current time.

2 Set the hour.

3 Set the minutes.



4 Set the seconds to 0.

5 Start the clock simultaneously with the signal from a timecast (telephone, etc.).

To confirm the date or time

Press the PRESENT button to display the date or time. One press displays the date and two presses displays the time. To return to the original counter display, press the COUNTER MODE button.

Time display

The time is displayed in 24-hour format.
Midnight and noon are displayed as follows:
Midnight: 0:00
Noon: 12:00

The day of the week is displayed as follows.

Sunday	SU
Monday	MO
Tuesday	TU
Wednesday	WE
Thursday	TH
Friday	Fr
Saturday	SA

Built-in clock

This unit's built-in clock operates using a quartz oscillator, and time variations caused by changes in temperature, etc., may accumulate. For precise recording of hour, minute, and second data by the built-in date function, it is recommended to set the clock every time the recording is performed.

Precautions when setting the time

- Set the time while the tape is stopped.
- Although this unit's clock automatically adjusts for leap years and long and short months, do not enter a date which does not exist.

Note

This unit uses a back-up battery to keep the clock running when the power is turned off. The life of the battery under normal use is approximately five years. When the battery starts to run down, the clock will stop operating normally. When this occurs, have the battery replaced at your dealer or nearest Sony Service Center (a battery replacement fee is required).

3-3-2 Adjusting Analog Input/Output Level

The analog input/output reference level during recording or playback can be adjusted on this unit.
The input/output reference level is factory set to +4 dBs at –20 dB from the full bit level. The adjustable range of the reference level is +8 dBs to –12 dBs.

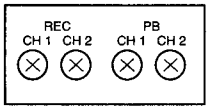
Procedure of adjusting analog input/output level

(1) Remove the cover of the RECORD/PLAYBACK controls on the rear panel.

(2) Playback the tape recorded in the level at –20 dB from the full bit. Adjust the PLAYBACK (CH 1/CH 2) volume so as to obtain the desired levels at the ANALOG OUT jacks.

(3) Set the INPUT LEVEL control on the front panel to the 10 (MAX) position, input an audio signal to the ANALOG IN jacks and adjust the RECORD (CH 1/CH 2) controls so as to obtain the desired levels at the ANALOG OUT jacks.

(4) Put the cover of the controls.

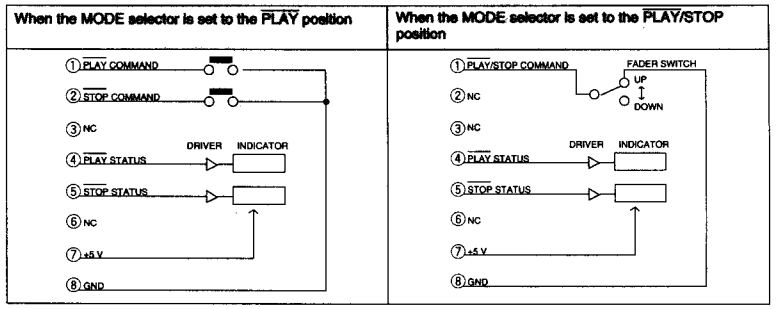


- Adjust the RECORD/PLAYBACK controls with the blade screwdriver (–) and be sure not to turn the controls forcibly nor to touch any other parts than the RECORD/PLAYBACK controls.

6-8 Fader Start

By connecting the fader unit or switch box, etc. to the REMOTE (8P) jack as described below, the remote control can be performed.

Connection diagram of the REMOTE (8P) jack



- Process the keyboard switch or the fader switch to prevent the chattering.
- When the current more than the maximum rating of this unit is required for the indicator or driver, use other power supply.

Be sure that the L-PLAY STATUS OUT of the REMOTE (8P) jack is different from that of the REMOTE (37P) jack as described below.

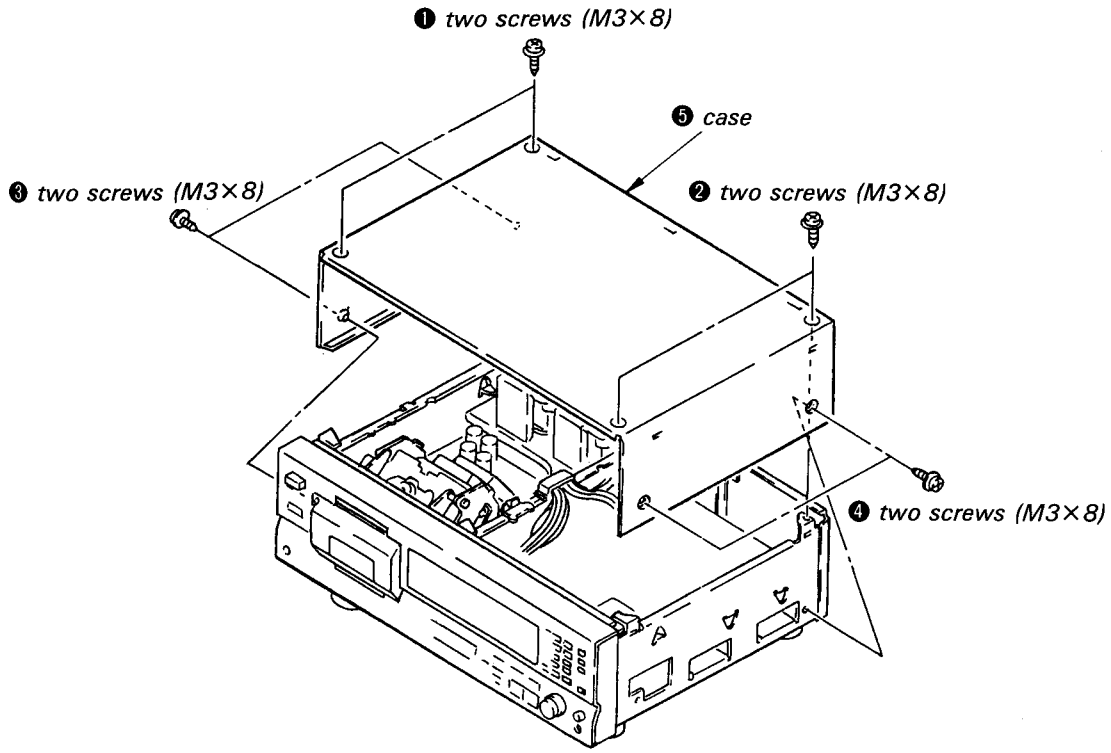
Conditions with that the level of the L-PLAY STATUS OUT becomes low

	REMOTE (8P)	REMOTE (37P)
L-PLAY SATUS OUT	In playback or recording mode: PLAY (►) CUE/REVIEW (► ►►/► ◄◄) REC (● ►)	When the ► indicator lights: PLAY (►) CUE/REVIEW (► ►►/► ◄◄) REC (● ►) PLAY-PAUSE (► II) REC-PAUSE (● ► II)
STOP STATUS OUT	In stop or pause mode: STOP (■) PLAY-PAUSE (► II) REC-PAUSE (● ► II) (The signal cannot be output unless the tape is loaded.)	—

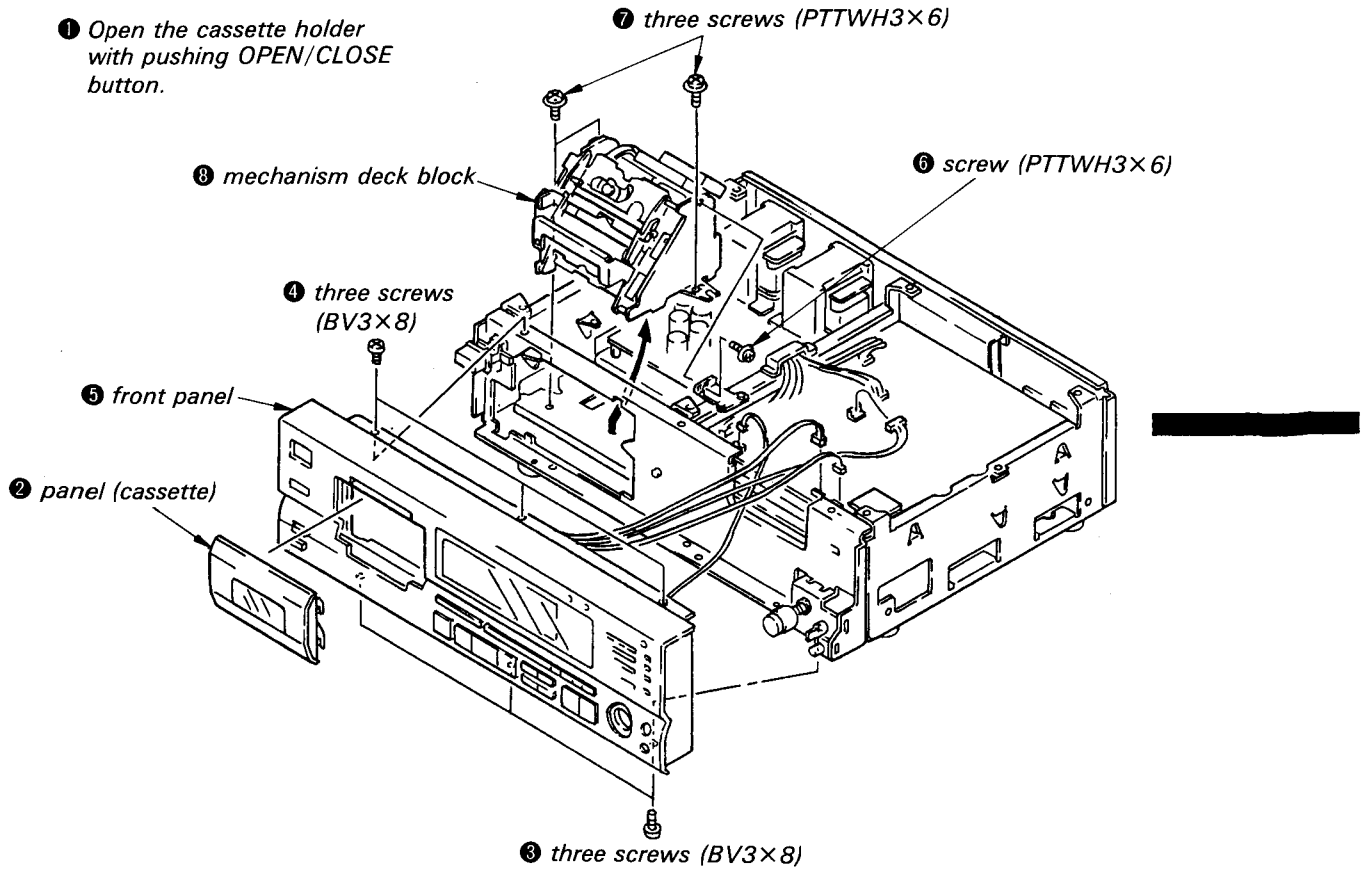
SECTION 3
DISASSEMBLY

NOTE: Follow the disassembly procedure in the numerical order given.

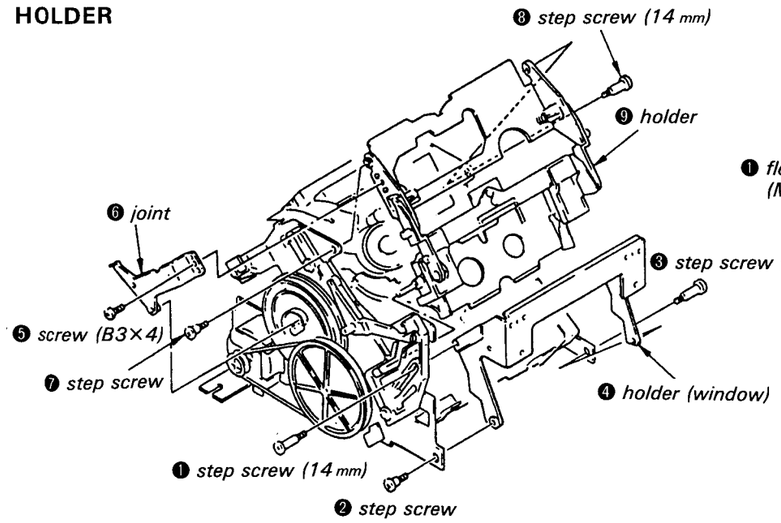
CASE



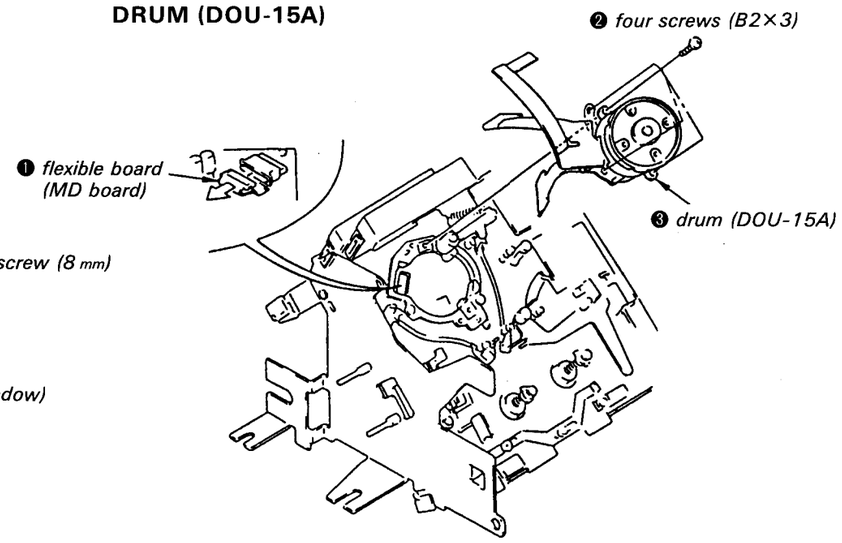
PANEL (CASSETTE), FRONT PANEL AND MECHANISM DECK BLOCK



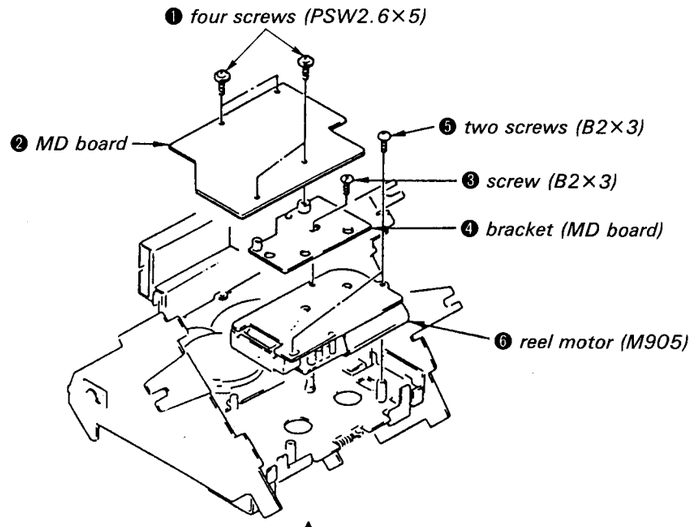
HOLDER



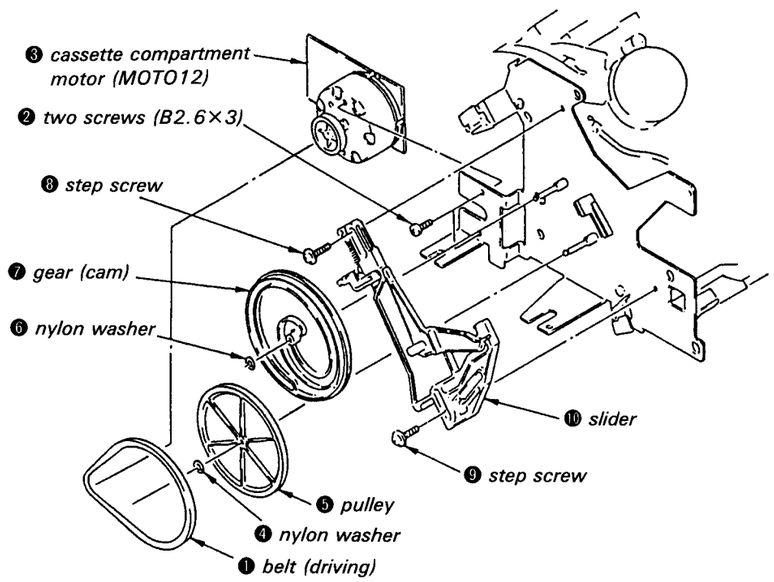
DRUM (DOU-15A)



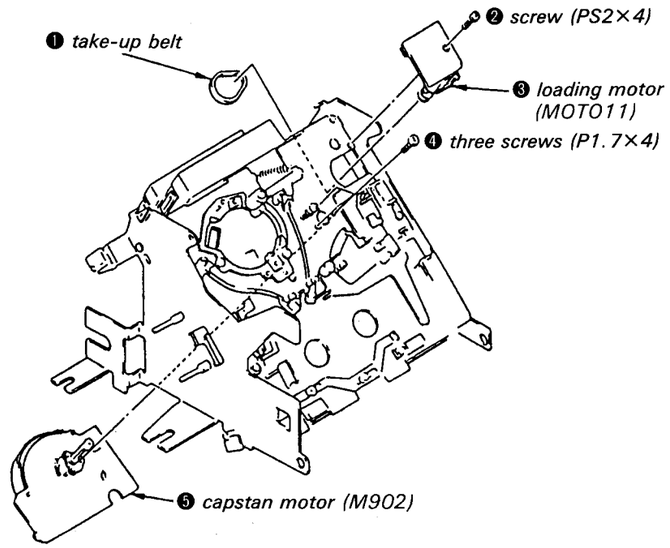
MD BOARD AND REEL MOTOR (M905)



CASSETTE COMPARTMENT MOTOR (MOTO12), PULLEY, GEAR (CAM) AND SLIDER



LOADING MOTOR (MOTO11) AND CAPSTAN MOTOR (M902)



SECTION 4
ADJUSTMENTS

Notes When Making Adjustments

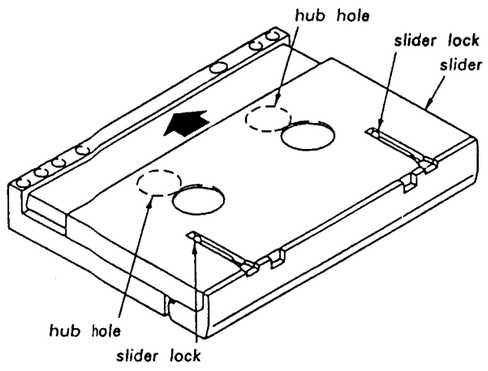
1. Adjustments should be performed in the order listed.

2. Use the following test tapes :
   TY-7111 (8-909-812-00) ---------- Level
   TY-7252 (8-909-822-00) ---------- Tracking
   TY-7551 (8-909-814-00) ---------- Functions
   TY-30B (8-892-358-00) ---------- Blank

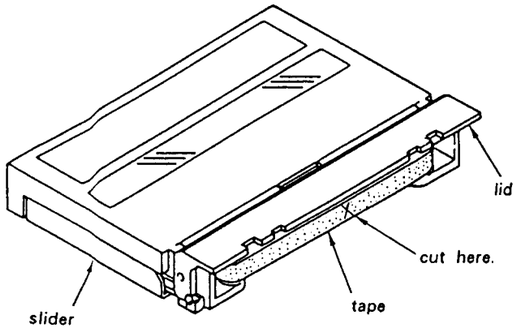
   Use the following torque meter :
   TW-7131 (8-909-708-71) ---------- FWD

3. Switches and controls should be set as follows unless otherwise specified.
   REMOTE switch : OFF
   REC MODE switch : LONG
   INPUT switch : ANALOG-48K
   INPUT LEVEL control : Min.
   PHONES LEVEL control : Min.

4. Creating an end sensor cassette
   (1) Press the tape slider lock and move the slider in the direction indicated by the arrow.

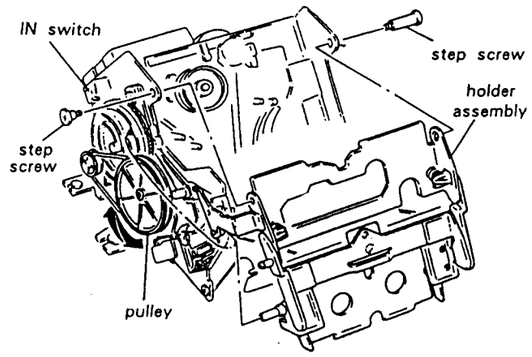


   (2) Open the lid and cut the tape.



   (3) Turn the hubs until the tape is completely inside the cassette (both T and S sides).
   The end sensor cassette for end sensor adjustment is now ready for sue.

5. Be careful not to move RV951 and RV952 on the RF AMP board in the mechanism assembly.
6. To adjust the tape path and guides, remove the holder assembly as shown in the diagram and use the DAT holder jig (J-8000-002-A). This will make it easier to perform adjustments.
   · First turning the pulley counterclockwise to put it in loading out status will make removal and reattachment of the holder assembly easier.
   · To perform adjustments, turn the pulley clockwise to put it in loading in status, load the cassette tape and set the IN switch to the ON position.



7. Test mode
   To set to the test mode, short-circuit between Pin ⑦ (XTEST) and Pin ⑥ (GND) of CN553 on the DIGITAL board. At this time, " TEST " letters turn on red on the fluorescent display. And at the same time, turning on the date on the fluorescent display, it becomes to the torque measurement mode.
   Test mode (Short-circuit between XTEST and GND)
   ① Turn off the date on the fluorescent display.
   (Press COUNTER MODE key)
   · S2, T2, F guides Adjustment
   · End Sensor Adjustment
   · Tape Path Adjustment
   · DPG Adjustment
   · ATF Pilot Adjustment
   ② Turn on the date on the fluoresent display.
   (Press DATE-RECORD key)

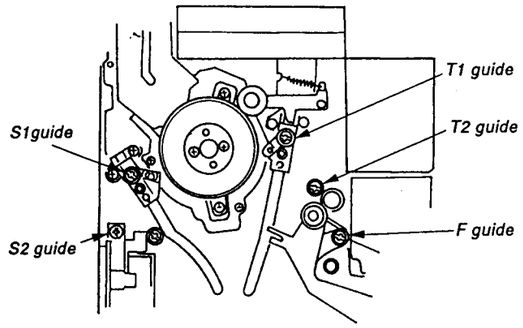
   · FWD Torque Adjustment } Torque
   · FWD Back-Tension Adjustment } Measurement Mode

   To release the test mode, release the short-circuit point between XTEST and GND.
   After the adjustments, be sure to release the test mode.

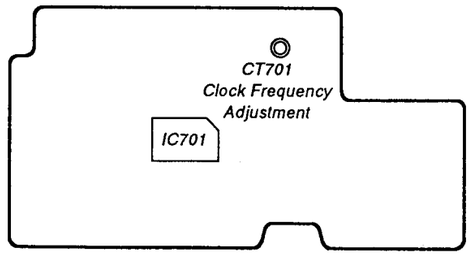
8. After adjustment, check the following items to confirm the tape speed:
   (1) With the REC MODE switch on STANDARD position, recording and playback must be done normally. (×1)
   (2) With the REC MODE switch on LONG position, recording and playback must be done normally. (×0.5)
   (3) A squeaky sound must be generated during CUE (▶ + ▶▶) or REVIEW (▶ + ◀◀) operation. (×3,×8)
   (4) The time must be properly displayed after FF (▶▶) or REV (◀◀) operation. (×16)
   (5) SEARCH (⏭ , ⏮) must be normal.

Adjust Parts Location

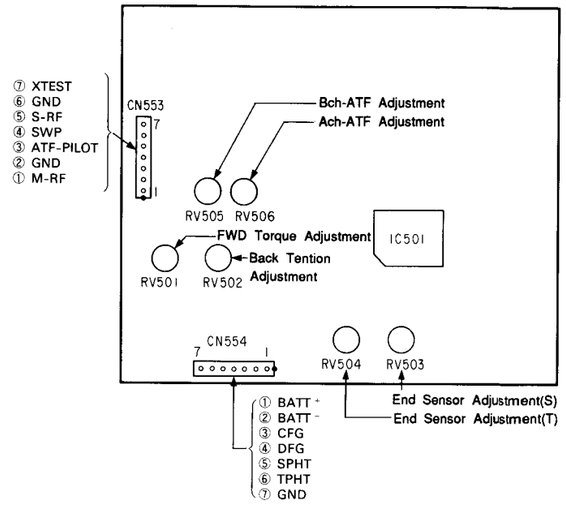
— Mechanism assembly —



— **Control Board** —
— SIDE A —



— **DIGITAL Board** —
— SIDE A —



4-1. MECHANICAL ADJUSTMENTS

After replacing the drum or related parts, adjust the S2,T2 and F guides and then perform the tape path (×1.5 FWD mode) fine adjustment of electrical adjustments.

S2,T2 Guide/F Guide Adjustment

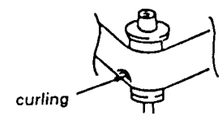
Adjustment Procedure :
(Test Mode : Turn out the light " DATE "on the display window)

1. Put the set into the test mode and load test tape TY-7252 (8-909-822-00).

2. Set the REC MODE switch to STANDARD (ATF : OFF) and press the AMS ⏭ key.

   Confirm there is no curling at the upper or lower flange of S2,T2, or F guides.
   When there is curling, return higher S2,T2,F guides and adjust by screwing in.

* Curling :



" Curling " refers to distortion on the tape during FWD operation. It can be identified by directing a light at the tape.

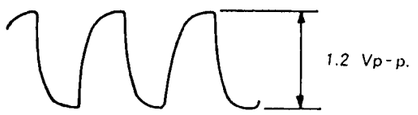
4-2. ELECTRICAL ADJUSTMENTS

End Sensor Adjustment

Perform the following adjustment when the holder has been removed or part of the mechanism deck section replaced.

Adjustment Procedure:

1. Connect an oscilloscope to CN554 pin ⑤ (SEND) (supply side) and CN554 pin ⑥ (TEND)(take-up side) on the DIGITAL board.
2. Load an end sensor cassette and put the set into the STOP (■) mode.
3. Adjsut RV503(supply side) and RV504(take-up side) on the MAIN board so that the oscilloscope waveform p-p value is 1.2Vp-p.



Adjustment Point : DIGITAL board

FWD Torque Adjustment

Adjustment Procedure:

1. Torque Measurement Mode : Turn on the light " DATE " on the display window.
   Put the set into the test mode and load the FWD torque meter TW-7131 (8-909-708-71).
2. Put the set into the PLAY (▶) mode.
3. Adjust RV501 so that the FWD torque value (take-up side rewinding torque) is between 10 − 15 g/cm (0.14 − 0.21 oz/inch).
4. Confirm that the value indicated by the torque meter is maintained for one full cycle.

Adjustment Point : DIGITAL board

FWD Back Tension Check

Check Procedure:

1. Torque Measurement Mode : Turn on the light " DATE " on the display window.
   Put the set into the test mode and load the FWD torque meter TW-7131 (8-909-708-71).
2. Put the set into the PLAY (▶) mode.
3. Adjust RV502 so that the back tension (supply side) is between 8 − 9 g/cm (0.11 − 0.13 oz/inch).
4. Confirm that the value indicated by the torque meter is maintained for one full cycle.

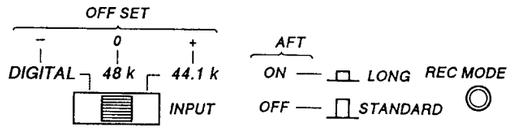
Tape Path Fine Adjustment (×1.5 FWD Mode)

Perform the following adjustment when the drum has been replaced.

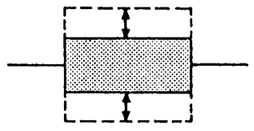
Adjustment Procedure:
(Test Mode : Turn out the light " DATE "on the display window)

1. Connect an oscilloscope CH-1 to CN553 pin ① (M-PF) and CH-2 to CN553 pin ④ (SWP) on the DIGITAL board.
2. Put the set into the test mode and load test tape TY-7252 (8-909-822-00).
3. Press the AMS (▶▶|) key.

Each part of switches on Test Mode.

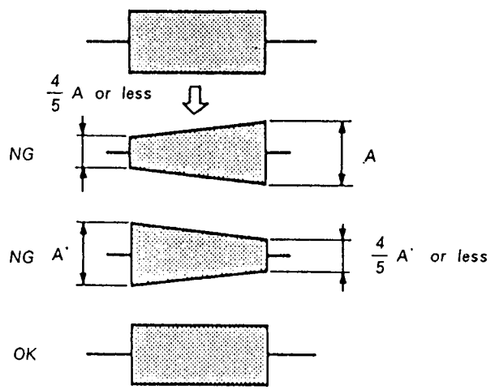


4. With the REC MODE switch set to STANDARD (ATF : OFF) and the INPUT switch set to ANALOG 44.1K or DIGITAL (OFFSET : + or −), fine adjust the S1 and T1 guides so that the oscilloscope RF signal waveform remains the same when high-low is repeated.

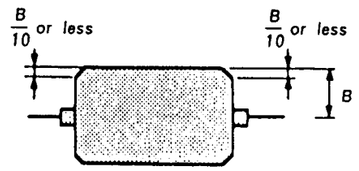


* Finish the adjustment by screwing in, and when there is curling at the upper or lower flange of S2, T2, or F guides, perform the guide adjustment.

5. Check the RF signal waveform with the REC MODE switch set to LONG (ATF : ON) and the INPUT switch set to ANALOG 44.1 K or DIGITAL (OFFSET : + or −).



6. Check the RF signal waveform with the REC MODE switch set to LONG (ATF : ON) and the INPUT switch set to ANALOG 48K (OFFSET : 0)
   (1) Confirm that the RF signal waveform peak value is 60 mV or more.
   (2) Confirm that the undershoot level of the RF signal waveform's flat portion is within 10%.



7. When the measured values are not within the above tolerances, repeat items 3 − 6 above.

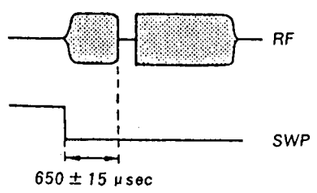
Adjustment Point : mechanism assembly

DPG Adjustment

Perform the following adjustment without fail when the drum has been replaced.

Adjustment Procedure:
(Test Mode : Turn out the light " DATE " on the display window.)

1. Connect oscilloscope CH-1 to CN553 pin ① (M-RF) and CH-2 to CN553 pin ④ (SWP) on the DIGITAL board. (Use CH-2 as the trigger.
   When the CH-2 signal is inverted, the trailing edge can be used for synchronization.)
2. Put the set into the test mode and load test tape TY-7252 (8-909-822-00).
3. Set the REC MODE switch to LONG (ATF : ON) and the INPUT switch to ANALOG 48K (OFFSET : 0).
4. Press the AMS (▶▶|) key.
5. Press the ◀◀ and ▶▶ keys as appropriate so that the gap between the oscilloscope SWP and RF signals becomes 650 ± 15 μsec.(Hold the ◀◀ and ▶▶ keys down for more than 1 second to perform rough adjustment. Hold them down for approximately 0.2 seconds for fine adjustment.)

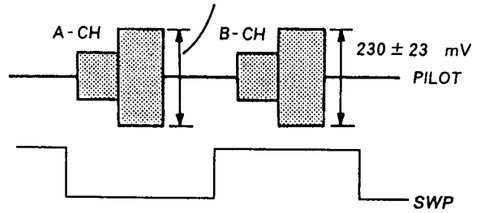


ATF Pilot Adjustment

Perform this adjustment after cleaning the heads with a cleaning cassette.

Adjust Procedure:
(Test Mode : Turn out the light " DATE " on the display window.)

1. Connect oscilloscope CH-1 to CN553 pin ③ (ATF-PILOT) and CH-2 to CN553 pin ④ (SWP) on the DIGITAL board. (Use CH-2 as the trigger.)
   When the CH-2 signal is inverted, the trailing edge can be used for synchronization.)
2. Put the set into the test mode and load test tape TY-7111 (8-909-812-00).
3. Put the set into the PLAY (▶) mode and adjust RV505 (B-CH) and RV506 (A-CH) on the DIGITAL board so that the oscilloscope PILOT waveform P-P value is 230 ± 23 mV.



Adjustment Point : DIGITAL board

cleaning the heads with a cleaning

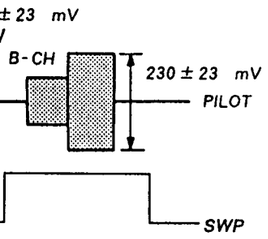
light " DATE " on the display

I-1 to CN553 pin ③ (ATF-PILOT)
④ (SWP) on the DIGITAL board.

inverted, the trailing edge can be

test mode and load test tape

AY (▶) mode and adjust RV505
A-CH) on the DIGITAL board
PILOT waveform P-P value is



board

4-3. CHECK AND ADJUSTMENS FOR DATE FUNCTION

Clock IC Back-up Check

When there is the short-circuit position on the pattern around the lithium battery (BATT01) or the clock IC (IC712) or disconnecting CN573 on removing the front panel assembly the clock is reset.

(In spite of pressing PRESET button, the date indication becomes "___Y___M___D" "___H___M___S")

At this time, check the back-up function by the procedures given below.

(1) Connect DC voltmeter to CN554 pin ① (BATT+) and pin ② (BATT−) on the DIGITAL board.

(2) When the power is off, the voltage value of the item (1) should be less than +30 mV.

(When the voltage value becomes +30 mV or more, Check around IC712 or replace IC712.)

(3) When the power is on, the voltage value of the item (1) should be less than 0 mV (−(minus) indication).

(When the voltage value becomes +(plus) indication, Check around D718 or replace D718.)

(4) When the above voltage values are normal, set the preset date and time (year, month, day, day of the week, hour, minute, second) according to the instruction manual.

(5) After setting the time on the item (4), turn power off and turn power on several seconds later, and check the clock works normally.

Back-up Battery Replacemant

The life of the back-up battery under normal use (normal temperature, normal humidity) is approximately ten years or more. (On the insrtuction manual, described " approximately five years ".)

Be carefull about the following point on the battery replacement.

- Repair the cause of the battery wastage by performing mentioned above " Clock IC Back-up Check ".
- The open-circuit voltage of the replaced battery is 3.0 V or more as the new one, and when it is 2.0 V or less, it is completely consumed, replace it with new one.
  After the battery replacement, perform " Clock IC Back-up Check " again and set the time*.
  * Time setting procedure described on page 13.

Clock Frequency Adjustment

Note:

- One normal repair, this adjustment is not neccesory. Don't turn the trimmer capacitor CT701.
- Only when needing this adjustment (X702 replacement or so on), perform in the order given.
- Use the frequency counter with six digits or more.

Adjustment Procedure:

1. Connect a frequency counter to the test land " OSC FREQ " on the CONTROL SW board.
2. Turn power on and adjust with CT701 so that the reading on the frequency counter becomes 2048.00±0.01 Hz. (in normal temparature)
3. Perform " Clock IC Back-up Check " described above.

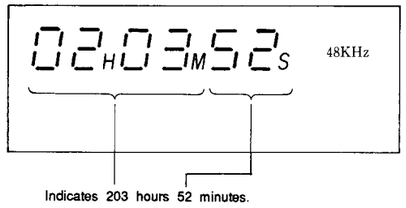
4-4. DISPLAY OF DRUM RUNNING HOUR METER

The PCM-2700A can display the drum running hours by pressing the button on the front panel. It is recommended that the drum assembly be replaced approximately every 1500hours.

Display method:

(1) With the mechanical deck in STOP status, press the numeric button " 0" together with the MODE button for COUNTER.

(2) Then, the counter will display the drum running hours for about 2 seconds, as shown below.



Notes:

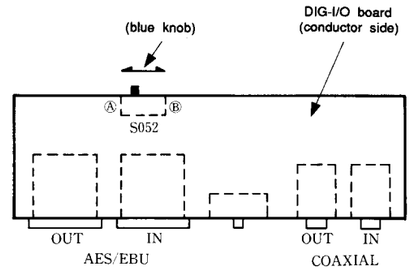
- Ignore H,M,S on the counter.
- Ignore numeral or characters displayed on other than the time counter.
- Up to 9,999 hours 59 minutes are displayed.

(3) This hour meter is reset to zero when the DPG adjustment as described previously is performed.

4-5. TRANSFER OF U-BIT THROUGH AES/EBU DIGITAL INPUT/OUTPUT

- In digital dubbing through AES/EBU digital input/output pins, the set has been set in the factory so that the start ID and skip ID using the U-bit of digital interface cannot be transferred.
- However, if the internal switch is changed over, the U-bit can be transferred.

Switching method:



(1) Remove the bottom plate.

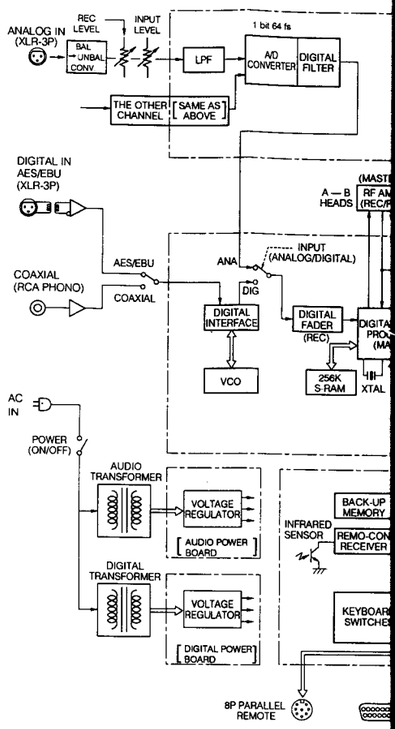
(2) Change over the switch (S052) on the DIG I/O board.

{ Position Ⓐ U-bit transfer OFF (factory setting)
Position Ⓑ U-bit transfer ON

Notes:

- In digital dubbing with 2 unit of PCM-2700A, set S052 to position Ⓑ on both transmission (playback) side and receiving (recording) side.
- Do not set S052 to position Ⓑ, if the U-bit of AES/EBU digital interface is used for other purpose.
- The channel status Bytel, Bit 4-7 of the AES3-1992 Standard are output as " 0000 " whichever position (Ⓐ or Ⓑ) the S052 is set to.

5-1. GENERAL BLOCK DIAGRAM



Clock Frequency Adjustment

Note:

- One normal repair, this adjustment is not neccesory. Don't turn the trimmer capacitor CT701.
- Only when needing this adjustment (X702 replacement or so on), perform in the order given.
- Use the frequency counter with six digits or more.

Adjustment Procedure:

1. Connect a frequency counter to the test land " OSC FREQ " on the CONTROL SW board.
2. Turn power on and adjust with CT701 so that the reading on the frequency counter becomes 2048.00±0.01 Hz. (in normal temparature)
3. Perform " Clock IC Back-up Check " described above.

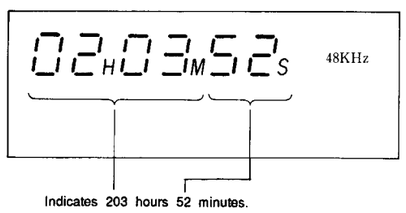
4-4. DISPLAY OF DRUM RUNNING HOUR METER

The PCM-2700A can display the drum running hours by pressing the button on the front panel. It is recommended that the drum assembly be replaced approximately every 1500hours.

Display method:

(1) With the mechanical deck in STOP status, press the numeric button " 0" together with the MODE button for COUNTER.

(2) Then, the counter will display the drum running hours for about 2 seconds, as shown below.



Notes:

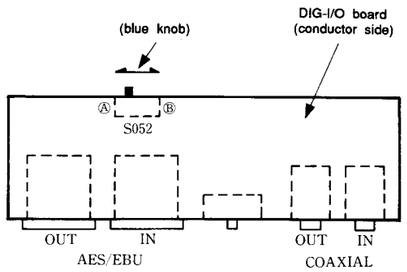
- Ignore H,M,S on the counter.
- Ignore numeral or characters displayed on other than the time counter.
- Up to 9,999 hours 59 minutes are displayed.

(3) This hour meter is reset to zero when the DPG adjustment as described previously is performed.

4-5. TRANSFER OF U-BIT THROUGH AES/EBU DIGITAL INPUT/OUTPUT

- In digital dubbing through AES/EBU digital input/output pins, the set has been set in the factory so that the start ID and skip ID using the U-bit of digital interface cannot be transferred.
- However, if the internal switch is changed over, the U-bit can be transferred.

Switching method:



(1) Remove the bottom plate.

(2) Change over the switch (S052) on the DIG I/O board.

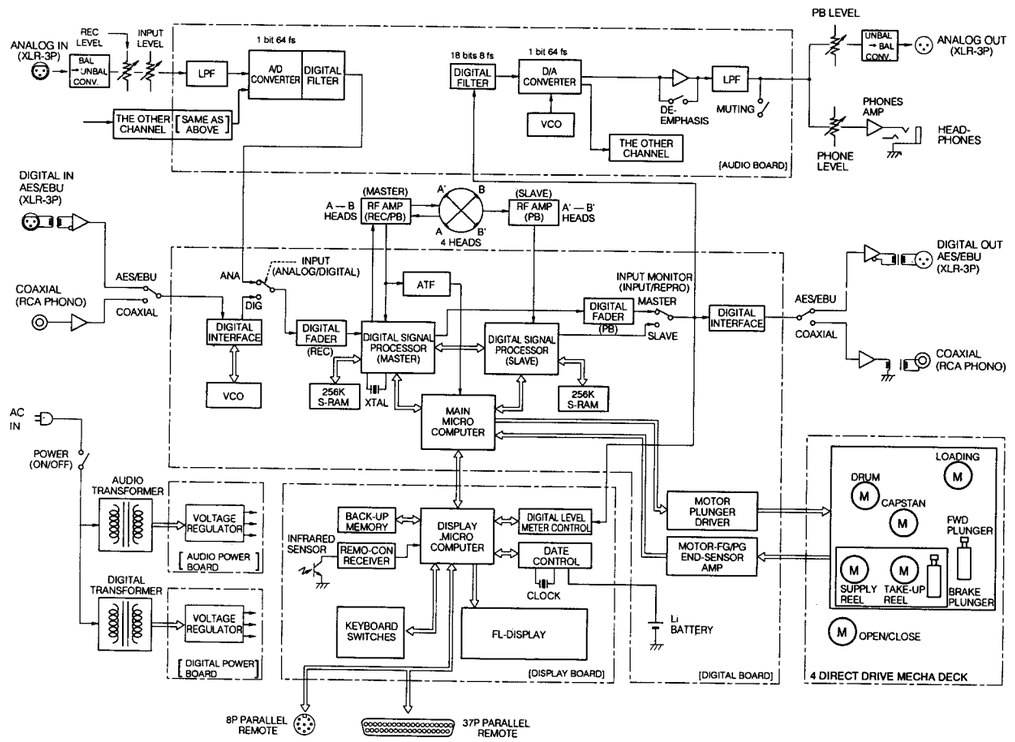
{ Position Ⓐ U-bit transfer OFF (factory setting)
{ Position Ⓑ U-bit transfer ON

Notes:

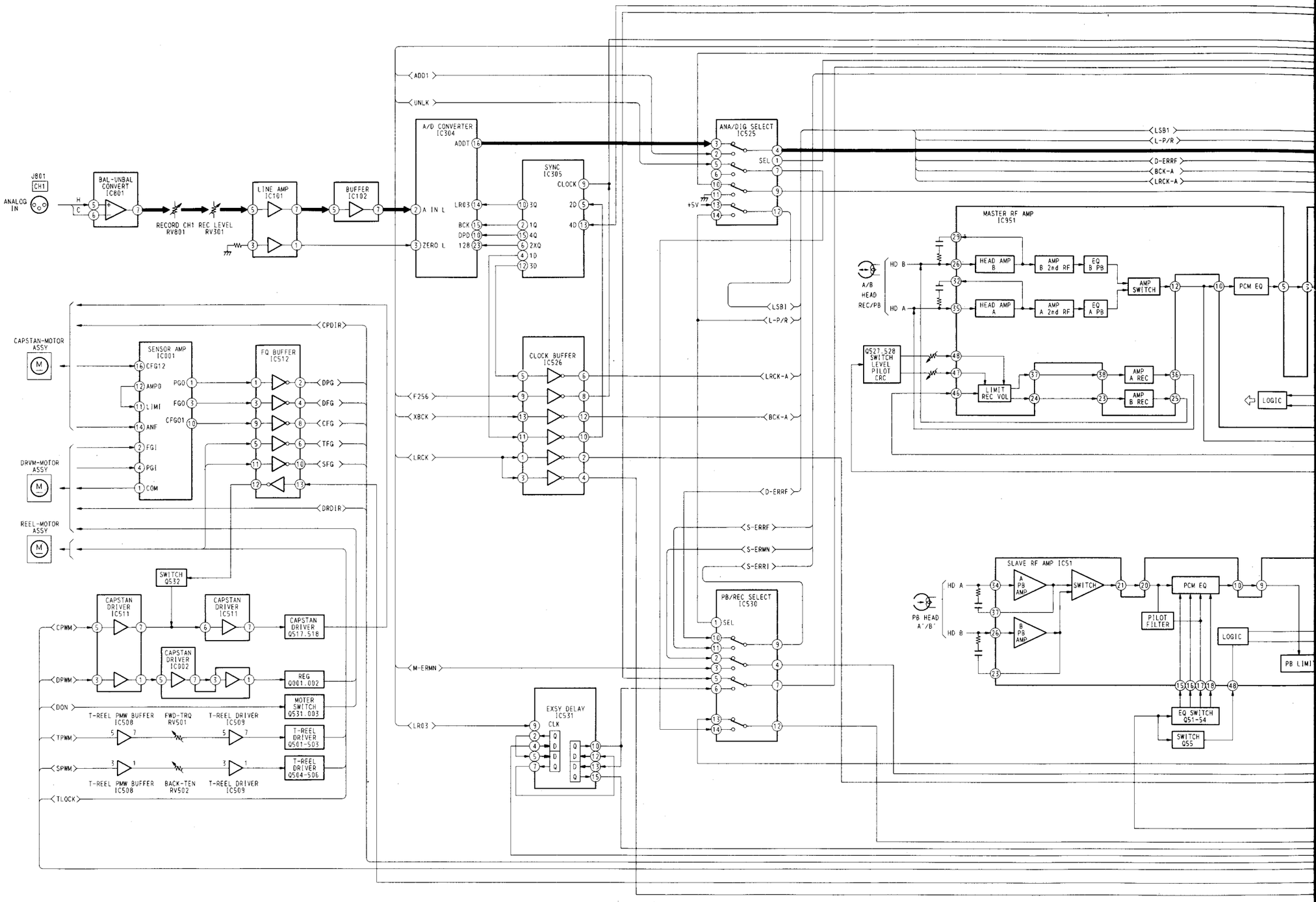
- In digital dubbing with 2 unit of PCM-2700A, set S052 to position Ⓑ on both transmission (playback) side and receiving (recording) side.
- Do not set S052 to position Ⓑ, if the U-bit of AES/EBU digital interface is used for other purpose.
- The channel status Bytel, Bit 4-7 of the AES3-1992 Standard are output as " 0000 " whichever position (Ⓐ or Ⓑ) the S052 is set to.

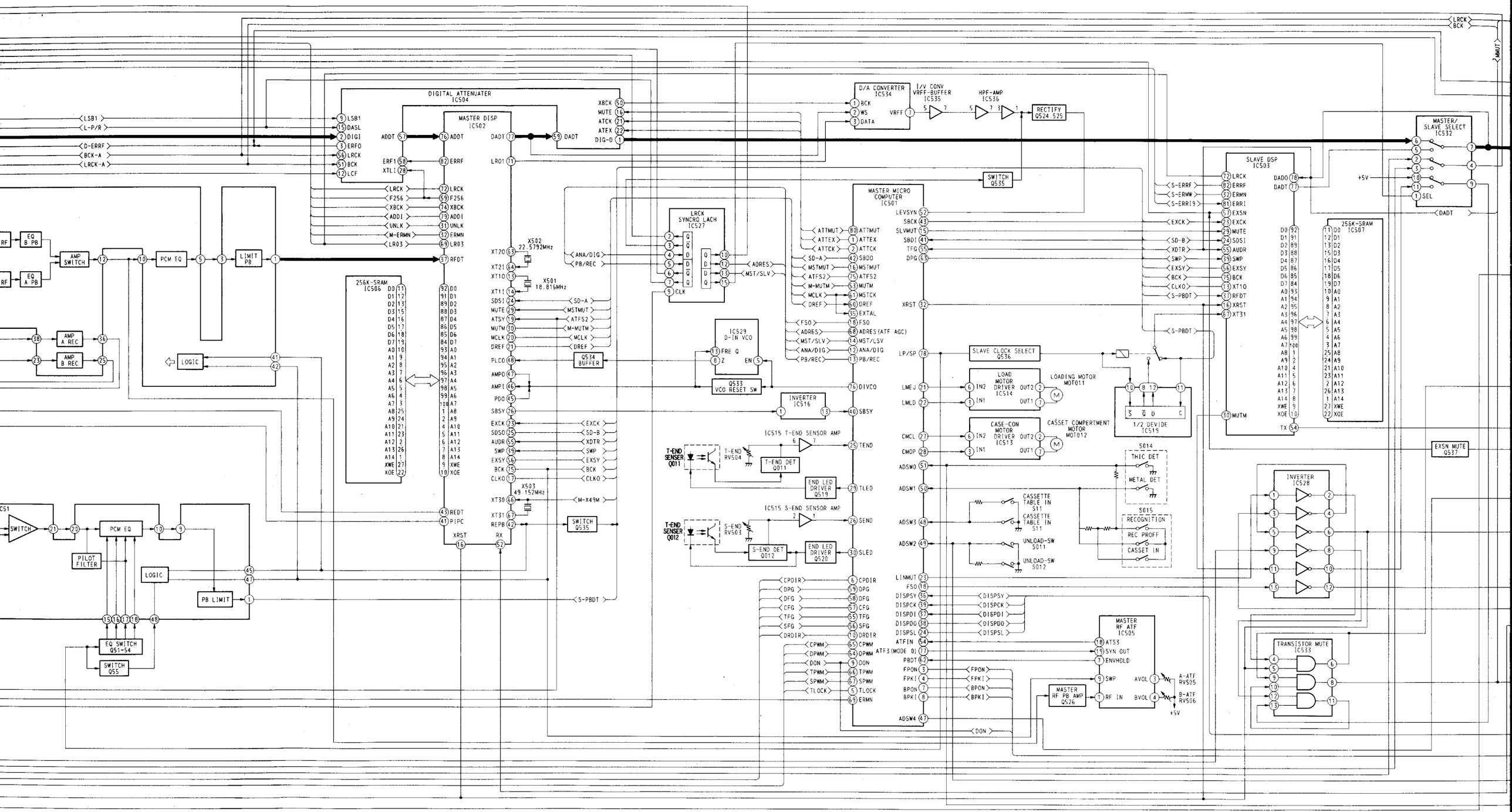
SECTION 5
DIAGRAMS

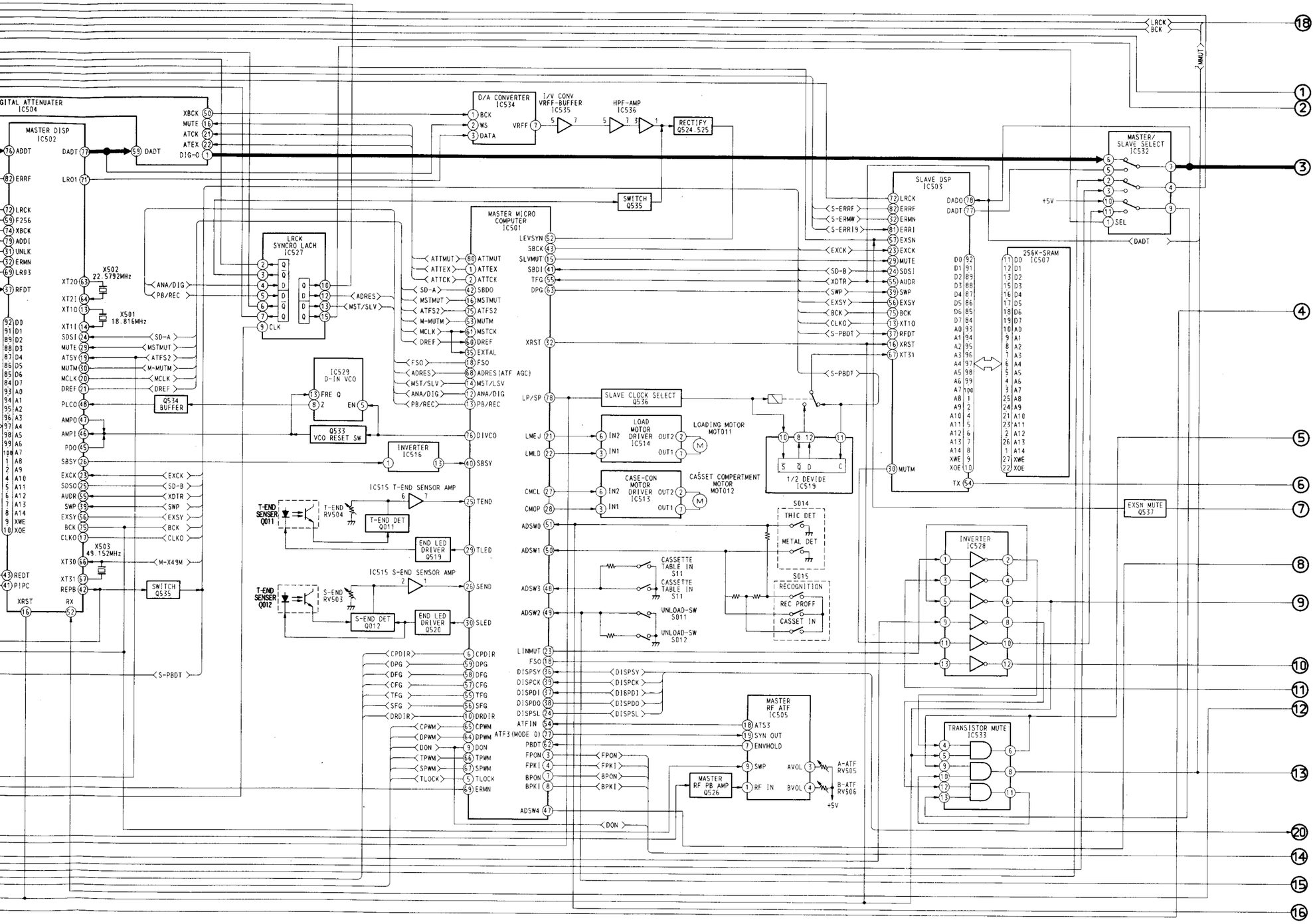
5-1. GENERAL BLOCK DIAGRAM

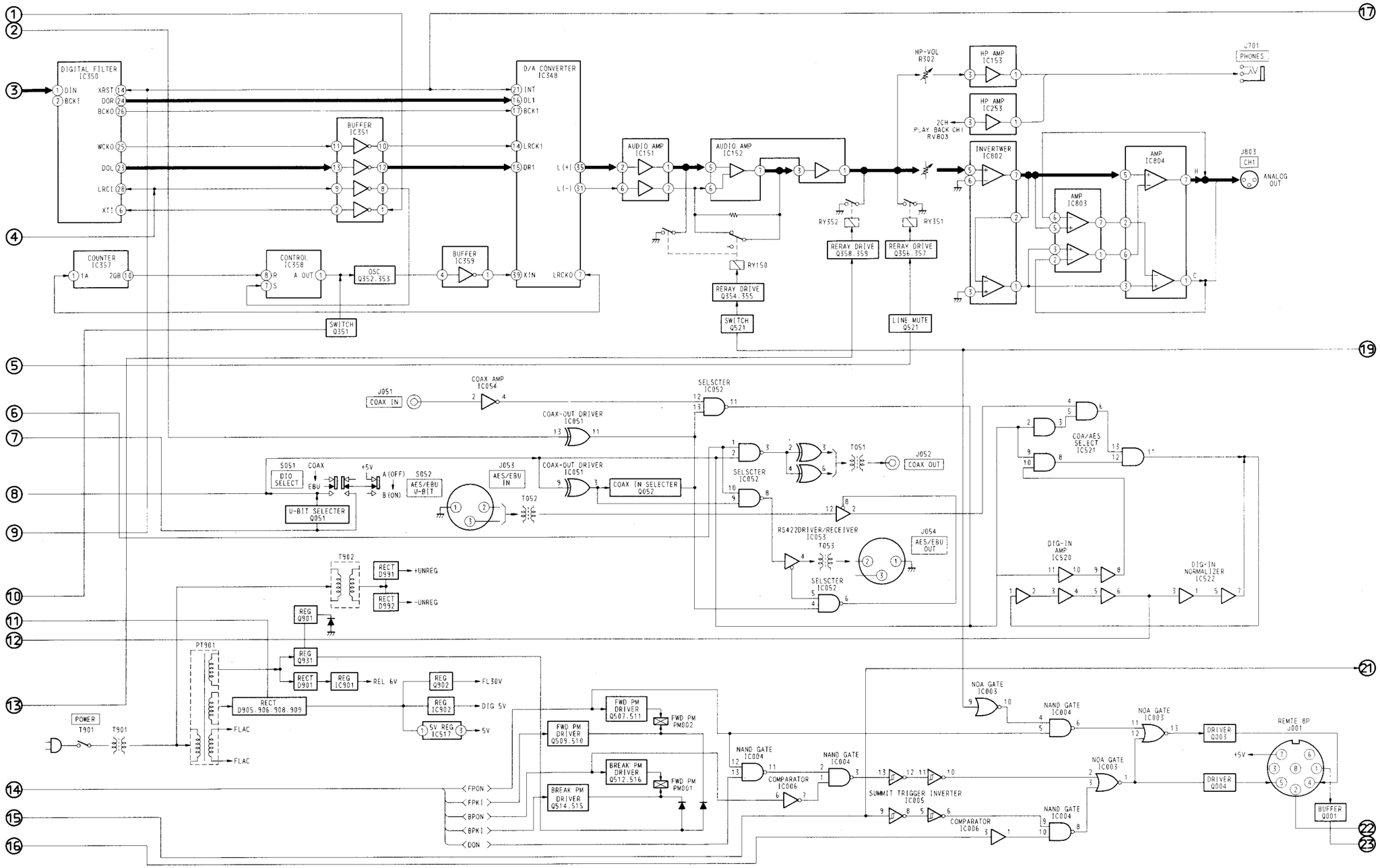


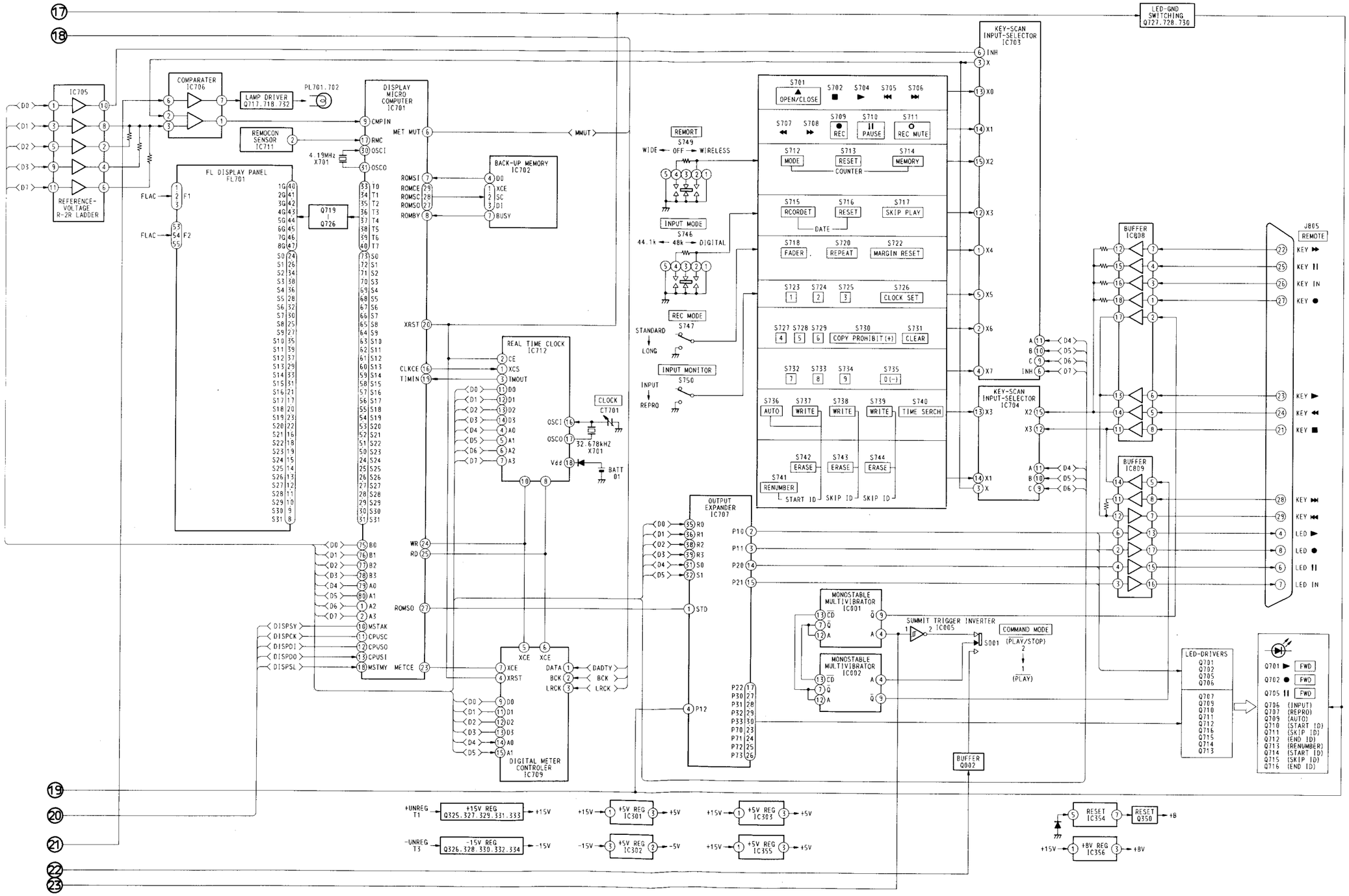
5-2. BLOCK DIAGRAM




DIGITAL ATTENUATER IC504
MASTER DISP IC502
MASTER MICRO COMPUTER IC501
SLAVE DSP IC503
MASTER/ SLAVE SELECT IC532
D/A CONVERTER IC534
I/V CONV VRFF-BUFFER IC535
HPF-AMP IC536
RECTIFY Q524.525
SWITCH Q535
LRCK SYNCRO LACH IC527
X502 22.5792MHz
X501 18.816MHz
X503 49.152MHz
256K-SRAM IC506
256K-SRAM IC507
IC529 D-IN VCO
Q533 VCO RESET SW
Q534 BUFFER
INVERTER IC516
IC515 T-END SENSOR AMP
IC515 S-END SENSOR AMP
T-END SENSER Q011
T-END RV504
T-END DET Q011
END LED DRIVER Q519
S-END SENSER Q012
S-END RV503
S-END DET Q012
END LED DRIVER Q520
SLAVE CLOCK SELECT Q536
LOAD MOTOR DRIVER IC514
LOADING MOTOR MOT011
CASE-CON MOTOR DRIVER IC513
CASSET COMPERTMENT MOTOR MOT012
1/2 DEVIDE IC519
S014 THIC DET
METAL DET
S015 RECOGNITION
REC PROFF
CASSET IN
CASSETTE TABLE IN S11
UNLOAD-SW S011
UNLOAD-SW S012
MASTER RF ATF IC505
MASTER RF PB AMP Q526
A-ATF RV505
B-ATF RV506
INVERTER IC528
TRANSISTOR MUTE IC533
EXSN MUTE Q537
AMP SWITCH
EQ B PB
EQ A PB
AMP A REC
AMP B REC
PCM EQ
LIMIT PB
LOGIC
PILOT FILTER
PB LIMIT
EQ SWITCH Q51-54
SWITCH Q55

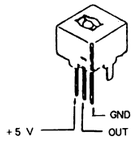

GITAL ATTENUATER IC504
MASTER DISP IC502
ADDT
ERRF
LRCK
F256
XBCK
ADDI
UNLK
ERMN
LR03
RFDT
DADT
LRO1
XBCK
MUTE
ATCK
ATEX
DIG-O
D/A CONVERTER IC534
BCK
WS
DATA
I/V CONV VRFF-BUFFER IC535
VRFF
HPF-AMP IC536
RECTIFY QS24.525
SWITCH QS35
MASTER MICRO COMPUTER IC501
LRCK SYNCRO LACH IC527
CLK
X502 22.5792MHz
X501 18.816MHz
X503 49.152MHz
XT20
XT21
XT10
XT11
XT30
XT31
ANA/DIG
PB/REC
ADRES
MST/SLV
SD-A
MSTMUT
ATFS2
M-MUTM
MCLK
DREF
FSO
ADRES(ATF AGC)
MST/SLV
ANA/DIG
PB/REC
ATTMUT
ATTEX
ATTCK
SBDO
M-X49M
REPB
RX
XRST
REDT
PIPC
SDSI
MUTE
ATSY
MUTM
PLCO
AMPO
AMP1
PDO
SBSY
EXCK
SDSO
AUDR
SWP
EXSY
BCK
CLKO
IC529 D-IN VCO
FRE Q
Z
EN
Q534 BUFFER
Q533 VCO RESET SW
INVERTER IC516
IC515 T-END SENSOR AMP
T-END SENSER Q011
T-END RV504
T-END DET Q011
END LED DRIVER Q519
TLED
IC515 S-END SENSOR AMP
T-END SENSER Q012
S-END RV503
S-END DET Q012
END LED DRIVER Q520
SEND
SLED
TEND
CPDIR
DPG
DFG
CFG
TFG
SFG
DRDIR
CPWM
DPWM
DON
TPWM
SPWM
TLOCK
ERMN
LEVSYN
SBCK
SLVMUT
SBDI
TFG
DPG
XRST
LP/SP
LMFJ
LMFD
CMCL
CMOP
ADSW0
ADSW1
ADSW3
ADSW2
LINMUT
FSO
DISPSY
DISPCK
DISPDI
DISPDO
DISPSL
ATFIN
ATF3(MODE 0)
PBDT
FPON
FPKI
BPON
BPKI
ADSW4
SLAVE CLOCK SELECT Q536
LOAD MOTOR DRIVER IC514
LOADING MOTOR MOT011
CASE-CON MOTOR DRIVER IC513
CASSET COMPERTMENT MOTOR MOT012
1/2 DEVIDE IC519
CASSETTE TABLE IN S11
UNLOAD-SW S011
UNLOAD-SW S012
S014
THIC DET
METAL DET
S015
RECOGNITION
REC PROFF
CASSET IN
MASTER RF ATF IC505
ATS3
SYN OUT
ENVHOLD
SWP
RF IN
AVOL
BVOL
A-ATF RV505
B-ATF RV506
+5V
MASTER RF PB AMP Q526
SLAVE DSP IC503
S-ERRF
S-ERRW
S-ERRI9
EXCK
SD-B
XDTR
SWP
EXSY
BCK
CLKO
S-PBDT
XT10
XRST
XT31
MUTM
TX
DADO
DADT
256K-SRAM IC507
MASTER/ SLAVE SELECT IC532
SEL
EXSN MUTE Q537
INVERTER IC528
TRANSISTOR MUTE IC533
LRCK
BCK
DADT
+5V
S-PBDT
DON
FPON
FPKI
BPON
BPKI
CPDIR
DPG
DFG
CFG
TFG
SFG
DRDIR
CPWM
DPWM
DON
TPWM
SPWM
TLOCK
ERMN
DISPSY
DISPCK
DISPDI
DISPDO
DISPSL
EXCK
SD-B
XDTR
SWP
EXSY
BCK
CLKO
S-PBDT
M-X49M
SWITCH QS35
SD-A
MSTMUT
ATFS2
M-MUTM
MCLK
DREF
ANA/DIG
PB/REC
ADRES
MST/SLV
XBCK
MUTE
ATCK
ATEX
DIG-O
LRCK
BCK
DADT
1
2
3
4
5
6
7
8
9
10
11
12
13
16
18
20
14
15


DIGITAL FILTER IC350
DIN
BCKI
XRST
DOR
BCKO
WCKO
DOL
LRCI
XTI
BUFFER IC351
D/A CONVERTER IC348
INT
DL1
BCK1
LRCK1
DR1
L(+)
L(-)
XTN
LRCKO
AUDIO AMP IC151
AUDIO AMP IC152
COUNTER IC357
CONTROL IC358
OSC Q352.353
BUFFER IC359
SWITCH Q351
RY150
RERAY DRIVE Q354.355
SWITCH Q521
RY352
RY351
RERAY DRIVE Q358.359
RERAY DRIVE Q356.357
LINE MUTE Q521
HP-VOL R302
HP AMP IC153
HP AMP IC253
2CH PLAY BACK CH1 RV803
J701 PHONES
INVERTWER IC802
AMP IC803
AMP IC804
J803 CH1 ANALOG OUT
J051 COAX IN
COAX AMP IC054
COAX-OUT DRIVER IC051
SELSCTER IC052
T051
J052 COAX OUT
S051 DIO SELECT
COAX
EBU
+5V
A(OFF)
B(ON)
S052 AES/EBU U-BIT
U-BIT SELECTER Q051
J053 AES/EBU IN
T052
COAX IN SELECTER Q052
RS422DRIVER/RECEIVER IC053
T053
J054 AES/EBU OUT
COA/AES SELECT IC521
DIG-IN AMP IC520
DIG-IN NORMALIZER IC522
T902
RECT D991
RECT D992
+UNREG
-UNREG
REG Q901
PT901
REG Q931
RECT D901
REG IC901
REL 6V
REG Q902
REG IC902
5V REG IC517
FL30V
DIG 5V
5V
RECT D905.906.908.909
FLAC
FLAC
POWER
T901
FWD PM DRIVER Q507.511
FWD PM DRIVER Q509.510
BREAK PM DRIVER Q512.516
BREAK PM DRIVER Q514.515
FWD PM PM002
FWD PM PM001
FPON
FPKI
BPON
BPKI
DON
NAND GATE IC004
COMPARATOR IC006
SUMMIT TRIGGER INVERTER IC005
NOA GATE IC003
DRIVER Q003
DRIVER Q004
REMTE 8P J001
BUFFER Q001

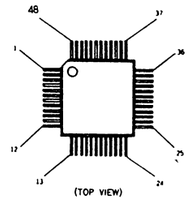

17
18
19
20
21
22
23
LED-GND SWITCHING Q727.728.730
KEY-SCAN INPUT-SELECTOR IC703
KEY-SCAN INPUT-SELECTOR IC704
IC705
REFERENCE-VOLTAGE R-2R LADDER
COMPARATER IC706
LAMP DRIVER Q717.718.732
PL701.702
REMOCON SENSOR IC711
4.19MHz X701
DISPLAY MICRO COMPUTER IC701
BACK-UP MEMORY IC702
FL DISPLAY PANEL FL701
Q719 ~ Q726
FLAC
F1
F2
REMORT
S749
WIDE
OFF
WIRELESS
INPUT MODE
44.1k
48k
DIGITAL
S746
REC MODE
STANDARD
LONG
S747
INPUT MONITOR
INPUT
REPRO
S750
S701 OPEN/CLOSE
S702
S704
S705
S706
S707
S708
S709 REC
S710 PAUSE
S711 REC MUTE
S712 MODE
S713 RESET COUNTER
S714 MEMORY
S715 RCORDET
S716 RESET DATE
S717 SKIP PLAY
S718 FADER
S720 REPEAT
S722 MARGIN RESET
S723 1
S724 2
S725 3
S726 CLOCK SET
S727 4
S728 5
S729 6
S730 COPY PROHIBIT(+)
S731 CLEAR
S732 7
S733 8
S734 9
S735 0(-)
S736 AUTO
S737 WRITE
S738 WRITE
S739 WRITE
S740 TIME SERCH
S741 RENUMBER
S742 ERASE
S743 ERASE
S744 ERASE
START ID
SKIP ID
SKIP ID
REAL TIME CLOCK IC712
CLOCK CT701
32.678kHZ X701
BATT 01
DIGITAL METER CONTROLER IC709
OUTPUT EXPANDER IC707
BUFFER IC808
BUFFER IC809
J805 REMOTE
KEY ▶▶
KEY ❙❙
KEY IN
KEY ●
KEY ▶
KEY ◀◀
KEY ■
KEY ▶▶|
KEY |◀◀
LED ▶
LED ●
LED ❙❙
LED IN
MONOSTABLE MULTIVIBRATOR IC001
MONOSTABLE MULTIVIBRATOR IC002
SUMMIT TRIGGER INVERTER IC005
S001
COMMAND MODE
(PLAY/STOP)
(PLAY)
BUFFER Q002
LED-DRIVERS
Q701 ▶ FWD
Q702 ● FWD
Q705 ❙❙ FWD
Q706 (INPUT)
Q707 (REPRO)
Q709 (AUTO)
Q710 (START ID)
Q711 (SKIP ID)
Q712 (END ID)
Q713 (RENUMBER)
Q714 (START ID)
Q715 (SKIP ID)
Q716 (END ID)
+UNREG T1
+15V REG Q325.327.329.331.333
+15V
+5V REG IC301
+5V
+5V REG IC303
+5V
-UNREG T3
-15V REG Q326.328.330.332.334
-15V
+5V REG IC302
-5V
+5V REG IC355
+5V
RESET IC354
RESET Q350
+8
+8V REG IC356
+8V

5-3. SEMICONDUCTOR LEAD LAYOUTS

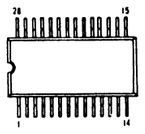
A1QH3020S



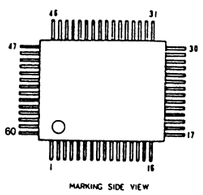
CXA1045Q-Z
CXA1364R



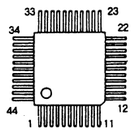
CXA1046M
CXK58257AM-12L



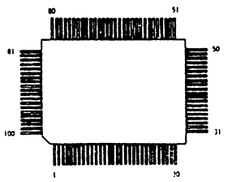
CXD1136Q



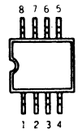
CXD2552Q-1



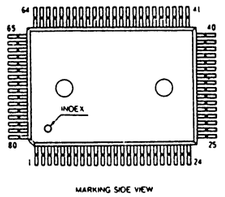
CXD2601AQ



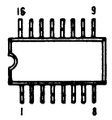
CXK1011M
LM358M
LM393M
μPC393G2



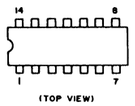
CXP80524-065Q
MSC62408-044GS-V1KA



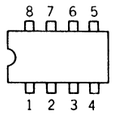
CX20115A



LC74HC08
MC74AC74N
SC7SU04F
SN74HC00AN
SN74HC04AN
SN74HC08AN
SN74HC14AN
SN74HC393AN
SN74LS624N
SN75ALS181N

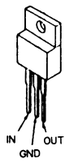


LF412CN/SL161841
LM393P
M5238P
NE5532P
NJM4556D-D
NJM4560D-D
TDA1543
μPC358C

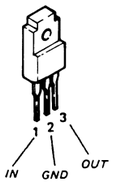


(Top view)

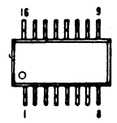
M5F7805L-720
μPC2405HF
μPC2406HF



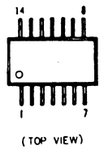
M5F7808L
TA7805S
TA79005S



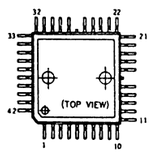
MC14051BF
MC14538BF
MSM6338MS-K



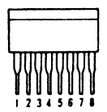
MC14069UBF
SN74HC00ANS
SN74HC02ANS
SN74HC14ANS
TC74HC86AF



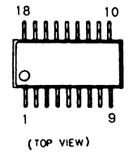
M50782FP



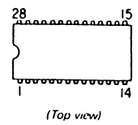
M54641L



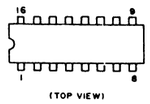
RF5C62



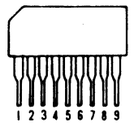
CS5326KP-A
SM5813APT



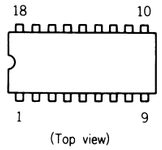
SN74HC157AN
SN74HC175AN
TC74HC123AP



TC5081AP



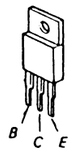
TD62382AP



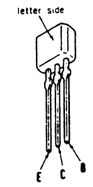
DTA114EK
DTC114EK
DTC124EK
DTC143TK
FA1A4M-L33
2SA1162-G
2SC1623-L6

DTA114ES
DTC114ES

2SA985A-QP
2SB1370-EF
2SC2275-P
2SD2012

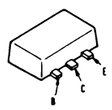


2SA1175-HFE
2SC2785-HFE

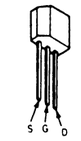


2SA1371-E
2SB1013-4
2SC3468-E
2SD1387-3

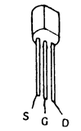
2SB798-DL
2SD1621-R



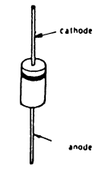
2SK241-GR



2SK246-GR1

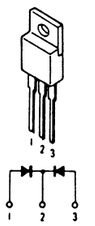


EQB01-08Q
HZS33-1L
1N4148M
10E2N
30DF2

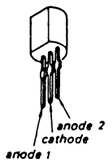


F10P20F

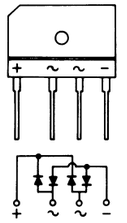
F10P20FR



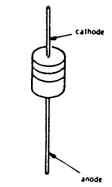
KV1320



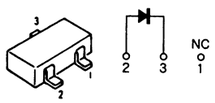
RBV-602-01



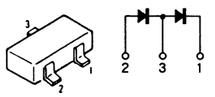
HZS6A1L
HZ4BLL
RD3.3ESB2
RD3.9ESB2
RD5.1JS-B2
1SS168
1SS202-1
11ES2



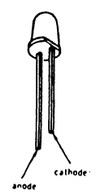
SB05-05CP



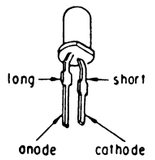
1SS226



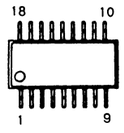
AA3432S



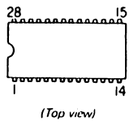
SEL2510W-D
GL-3PR9



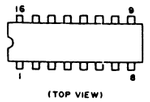
RF5C62



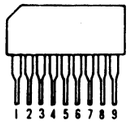
CS5326KP-A
SM5813APT



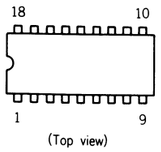
SN74HC157AN
SN74HC175AN
TC74HC123AP



TC5081AP



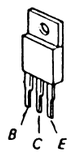
TD62382AP



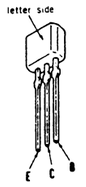
DTA114EK
DTC114EK
DTC124EK
DTC143TK
FA1A4M-L33
2SA1162-G
2SC1623-L6

DTA114ES
DTC114ES

2SA985A-QP
2SB1370-EF
2SC2275-P
2SD2012

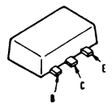


2SA1175-HFE
2SC2785-HFE



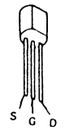
2SA1371-E
2SB1013-4
2SC3468-E
2SD1387-3

2SB798-DL
2SD1621-R

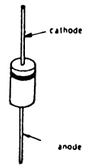


2SK241-GR

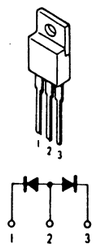
2SK246-GR1



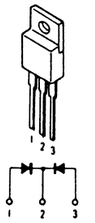
EQB01-08Q
HZS33-1L
1N4148M
10E2N
30DF2



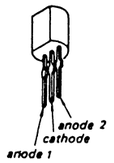
F10P20F



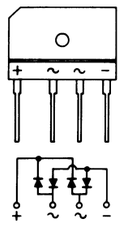
F10P20FR



KV1320

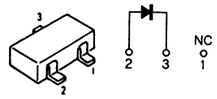


RBV-602-01

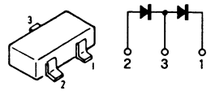


HZS6A1L
HZ4BLL
RD3.3ESB2
RD3.9ESB2
RD5.1JS-B2
1SS168
1SS202-1
11ES2

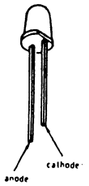
SB05-05CP



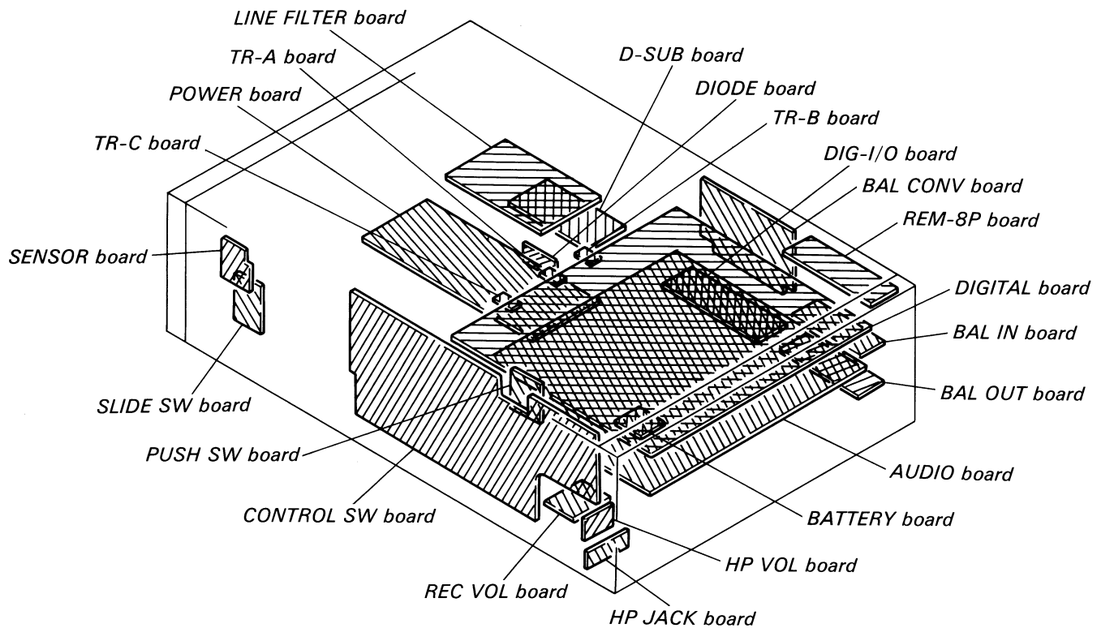
1SS226



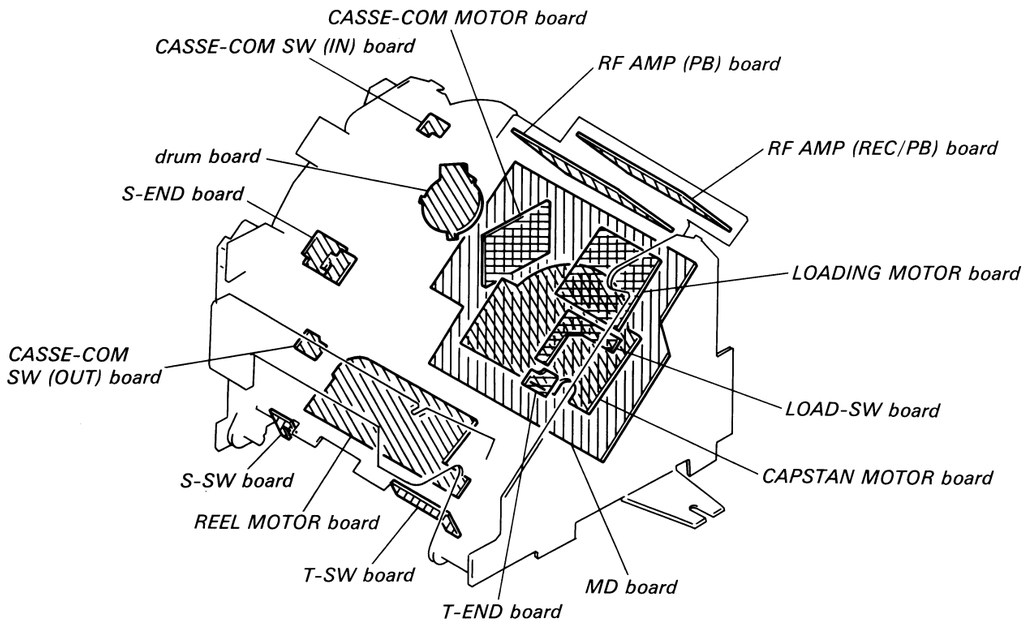
AA3432S



5-4. CIRCUIT BOARDS LOCATION



(DATM-51)



5-5. PRINTED WIRING BOARDS —RF/MD Section—

• See page 35 for Semiconductor Lead Layouts.

• See page 37 for Circuit Boards Location.

• Semiconductor Location

Ref. No.	Location
D011	J-16
D012	J-16
IC51	G-2
IC001	G-17
IC002	I-17
IC951	H-9
Q51	I-5
Q52	I-5
Q53	H-5
Q54	H-5
Q55	I-6
Q001	I-16
Q002	I-16
Q003	F-17
Q011	D-2
Q012	B-14

【LOAD SW BOARD】

【LOADING MOTOR BOARD】

【T-END BOARD】

MECHANISM ASSY TOP VIEW

MECHANISM ASSY BOTTOM VIEW

【S-END BOARD】

【RF AMP (PB) BOARD】—SIDE A—

【RF AMP (PB) BOARD】—SIDE B—

【RF AMP (REC/PB) BOARD】—SIDE A—

【RF AMP (REC/PB) BOARD】—SIDE B—

(See page 62)

(See page 63)

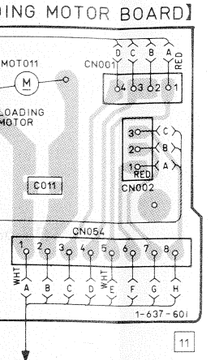
(See page 63)

Note:

- ○—— : parts extracted from the component side.
- ●—— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ● : Through hole.
- ○—●—○ : Jumper wire connected to the ground pattern on the component side.
- : Pattern on the side which is seen.
- : Pattern of the rear side.

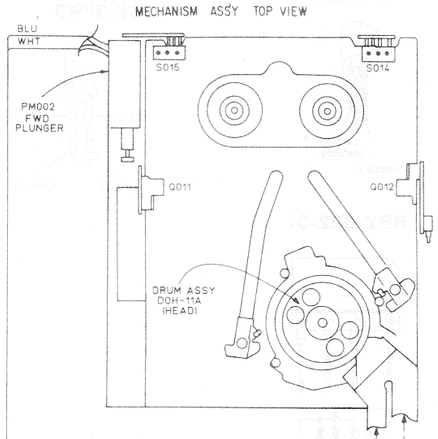
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

【DING MOTOR BOARD】

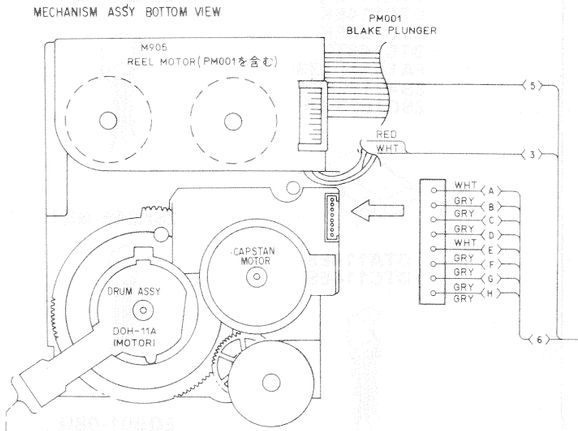


TO DIGITAL BOARD CN504
(See page 62)

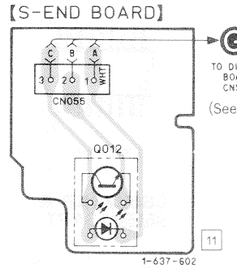
MECHANISM ASSY TOP VIEW



MECHANISM ASSY BOTTOM VIEW

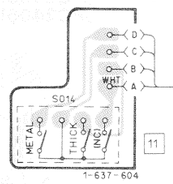


【S-END BOARD】

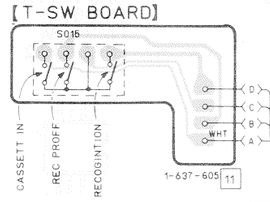


TO DIGITAL BOARD CN505
(See page 62)

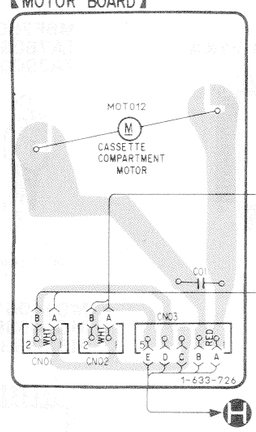
【S-SW BOARD】



【T-SW BOARD】

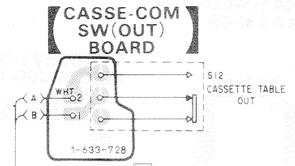


【CASSE-COM MOTOR BOARD】

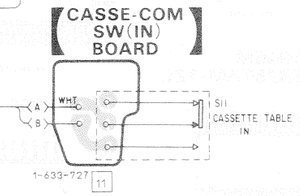


TO DIGITAL BOARD CN506
(See page 62)

【CASSE-COM SW(OUT) BOARD】

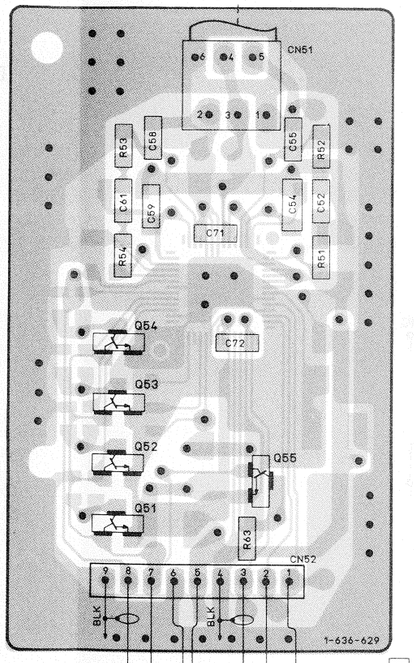


【CASSE-COM SW(IN) BOARD】



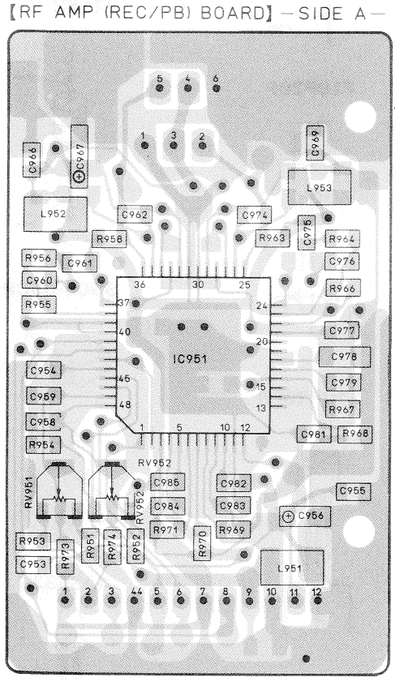
(FLEXIBLE BOARD)

【RF AMP (PB) BOARD】—SIDE B—

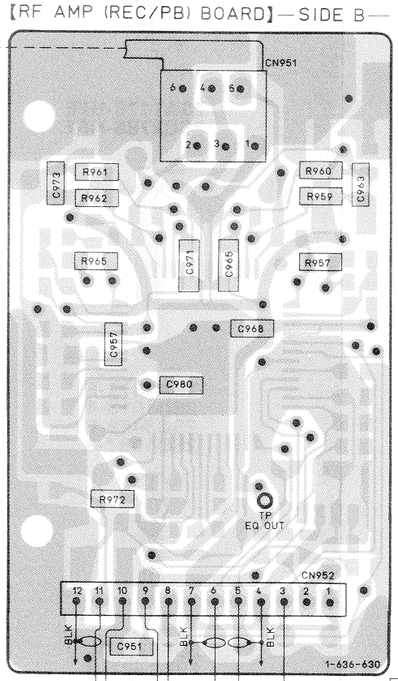


TO DIGITAL BOARD CN508
(See page 63)

【RF AMP (REC/PB) BOARD】—SIDE A—

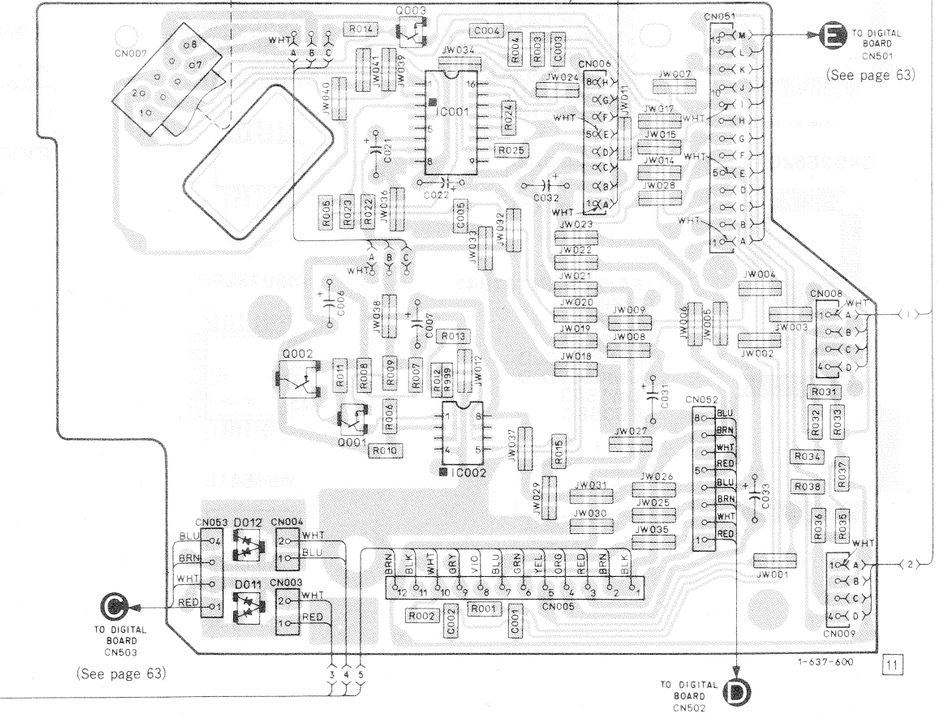


【RF AMP (REC/PB) BOARD】—SIDE B—



TO DIGITAL BOARD CN507
(See page 63)

【MD BOARD】



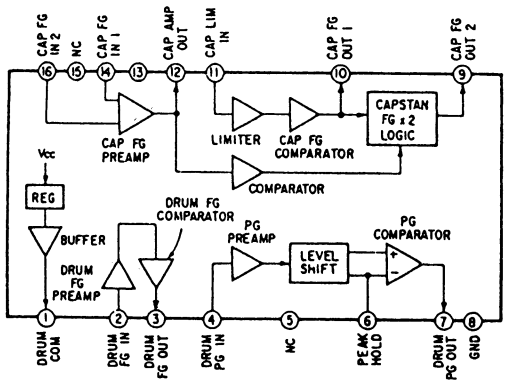
TO DIGITAL BOARD CN501
(See page 63)

TO DIGITAL BOARD CN503
(See page 63)

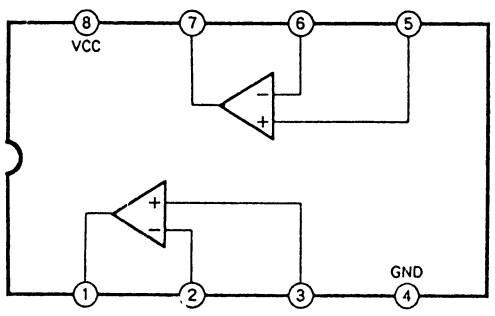
TO DIGITAL BOARD CN502
(See page 63)

• IC Block Diagrams

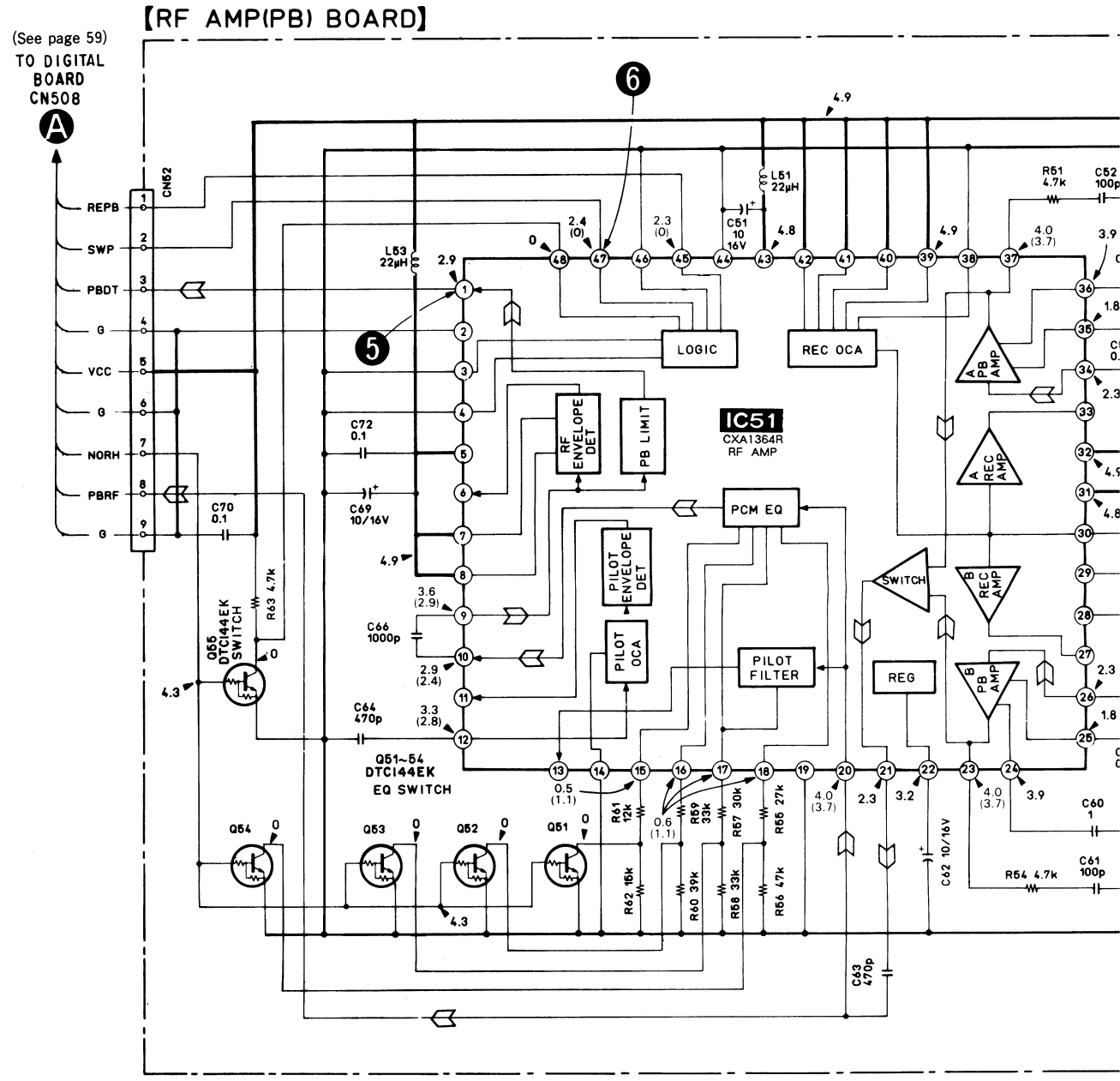
IC001 CX20115A



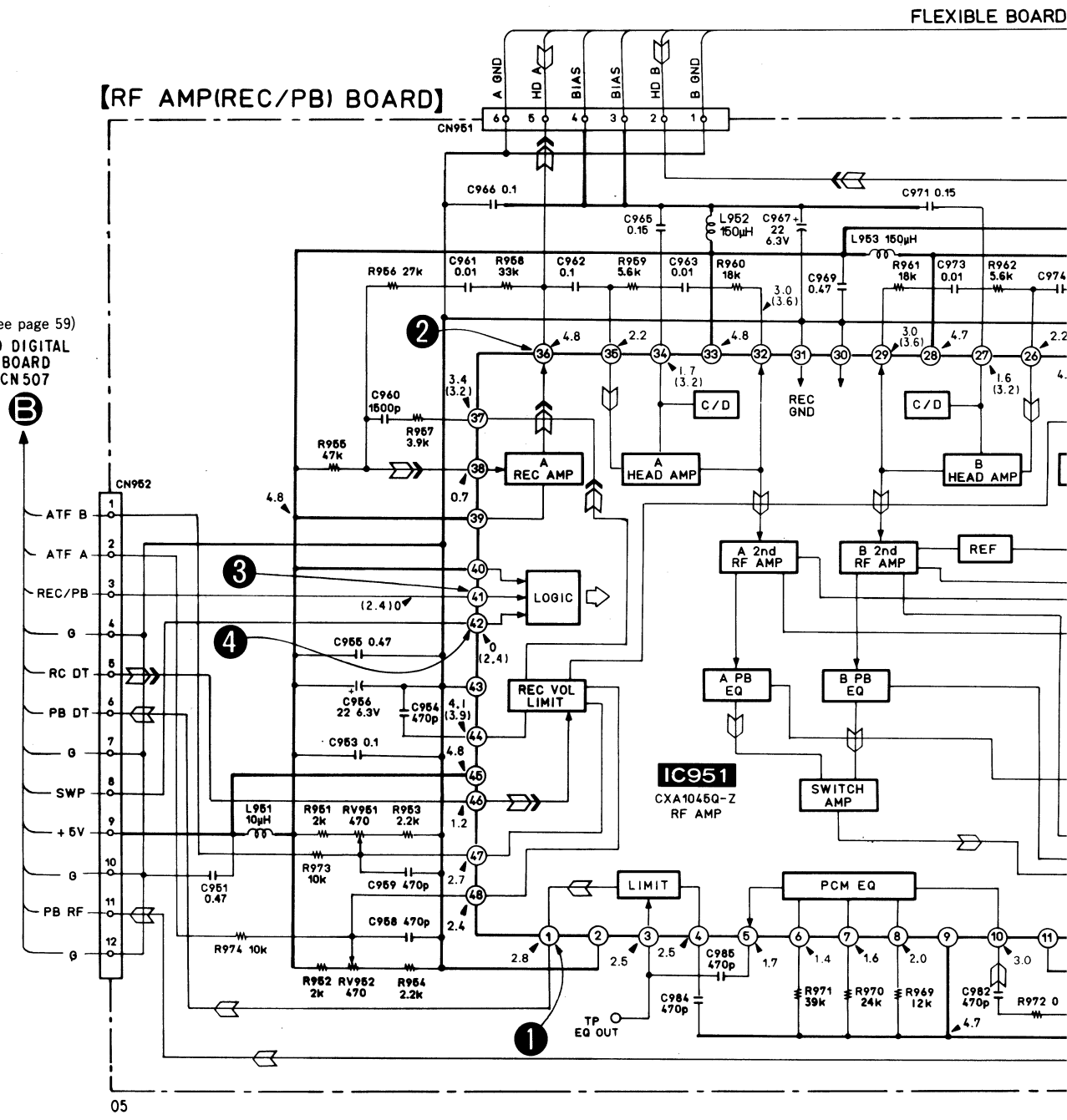
IC002 LM358M

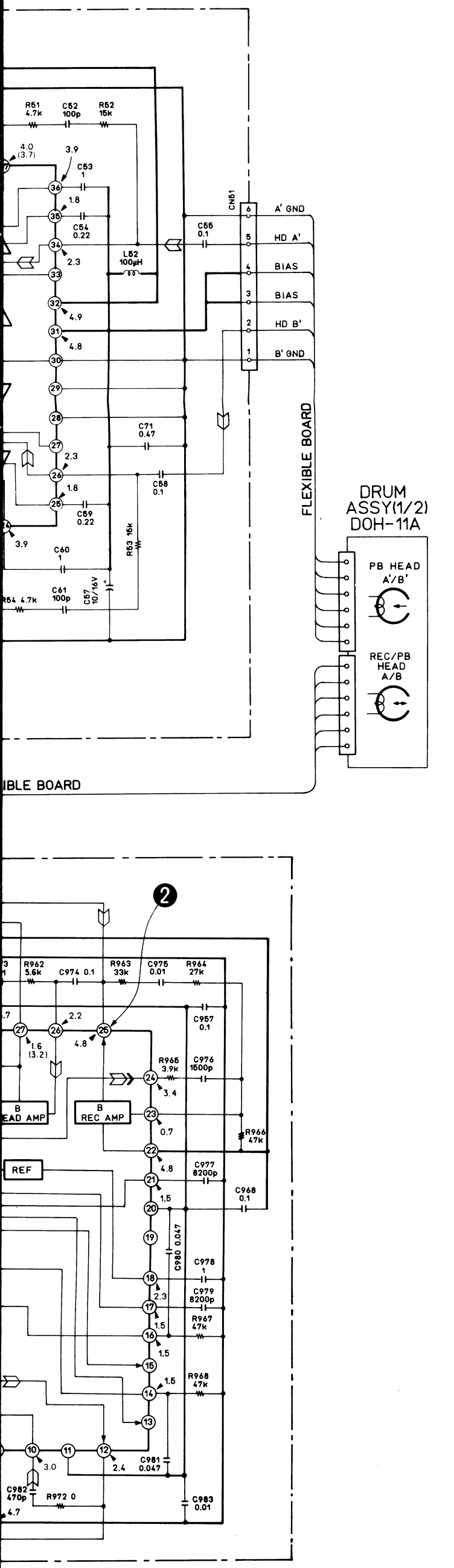


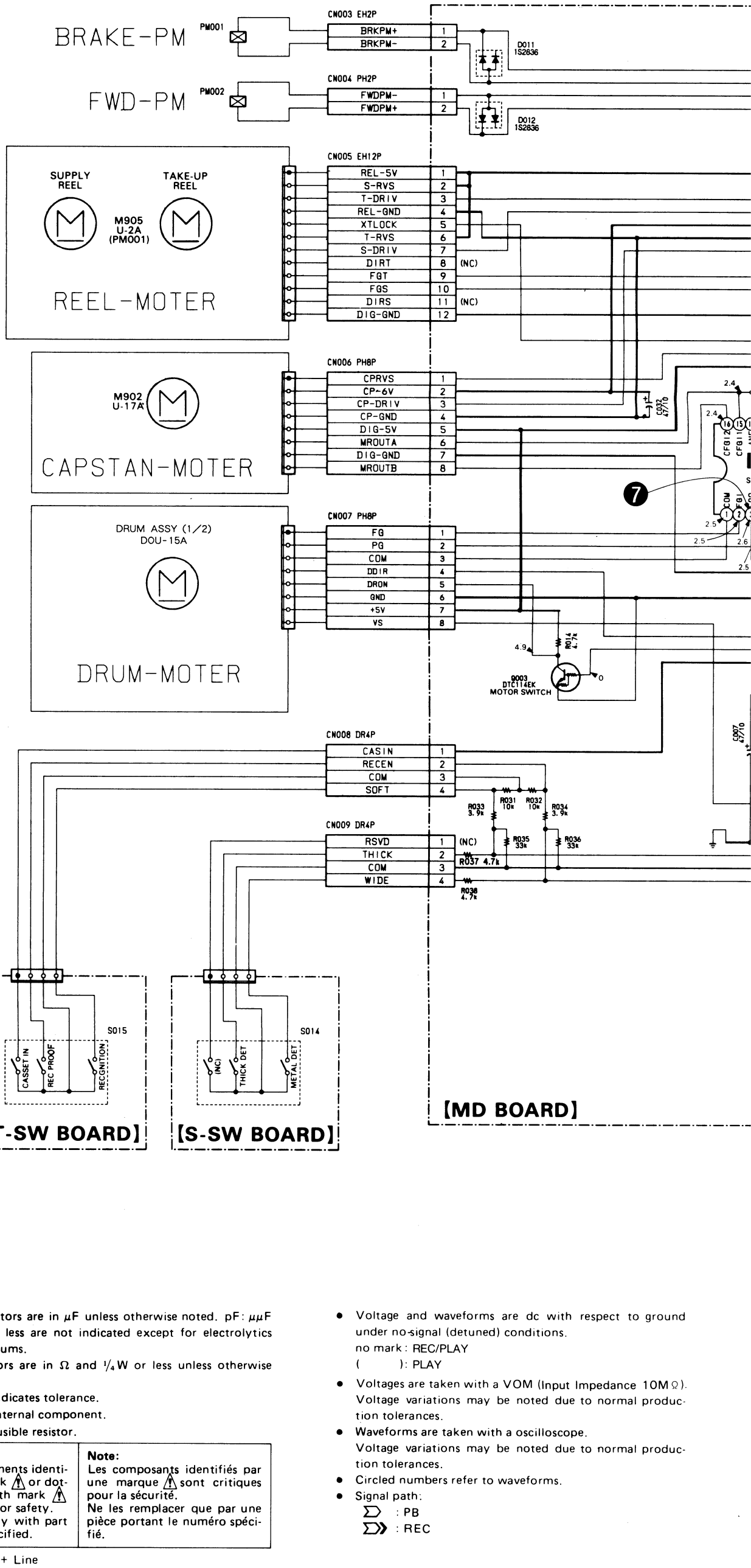
【RF AMP(PB) BOARD】



【RF AMP(REC/PB) BOARD】







05

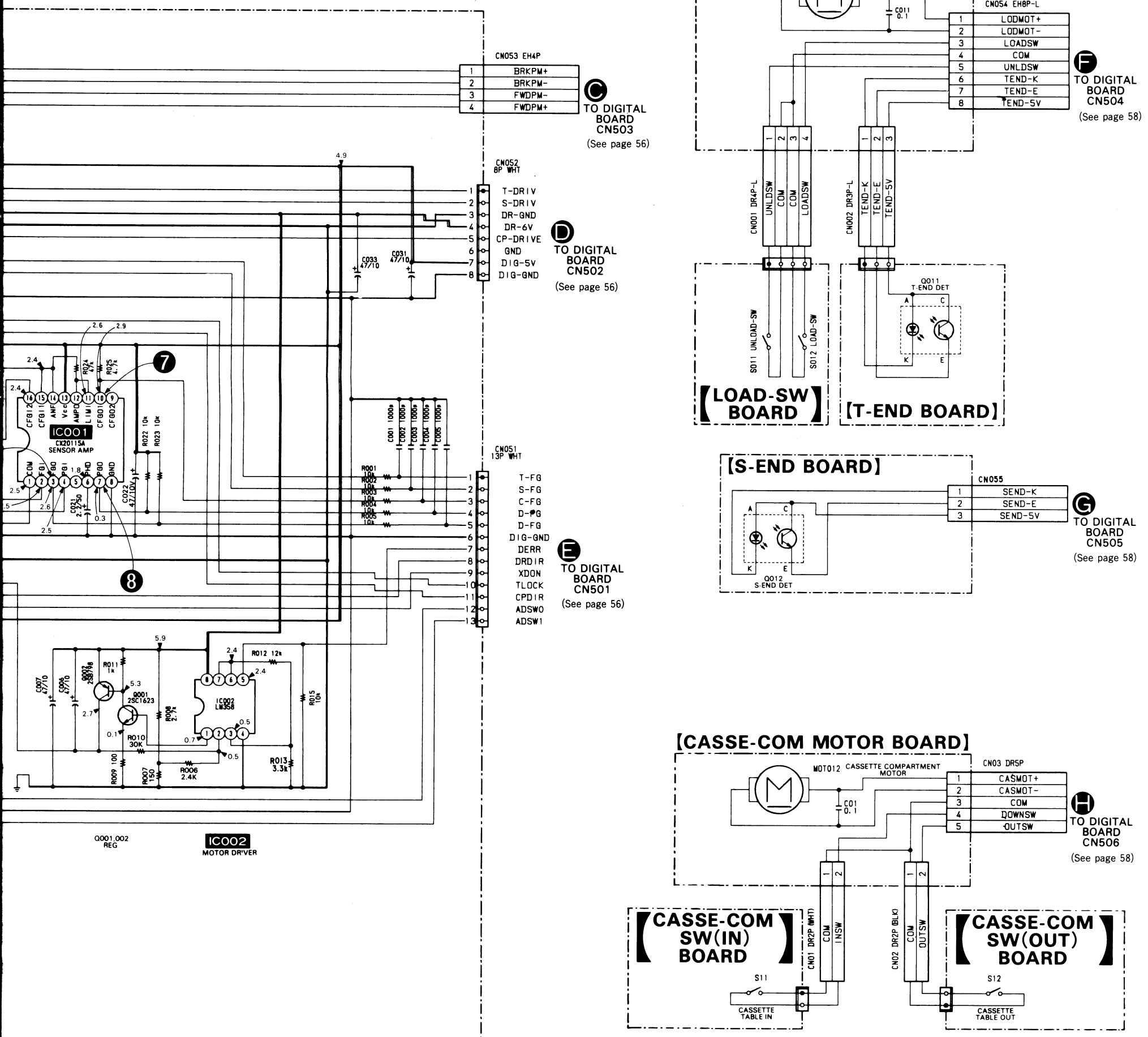
Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- % : indicates tolerance.
- △ : internal component.
- ⊣w⊢ : fusible resistor.

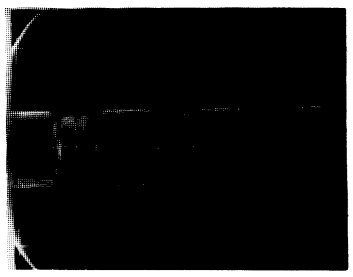
Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- ▬▬ : B+ Line
- ▬ ▬ ▬ : B− Line
- ▭ : adjustment for repair.

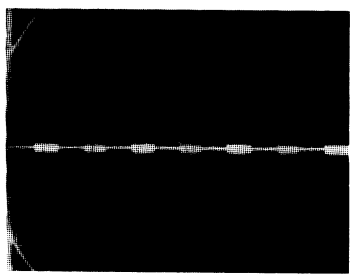
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : REC/PLAY
  ( ) : PLAY
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path:
  ⊃ : PB
  ⊃» : REC



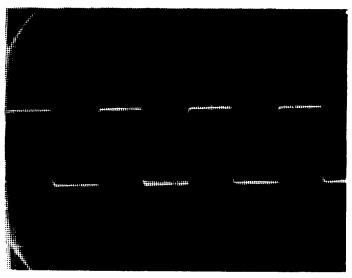
• **RF/MD Section Waveforms**



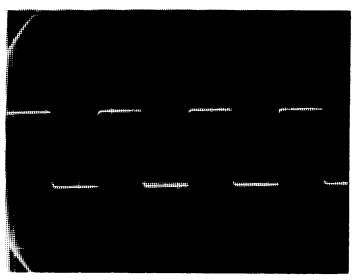
❶ 0.5V/div 5msec/div REC



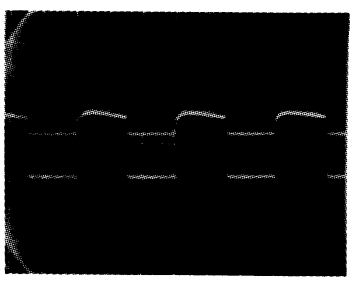
❷ 2V/div 10msec/div REC



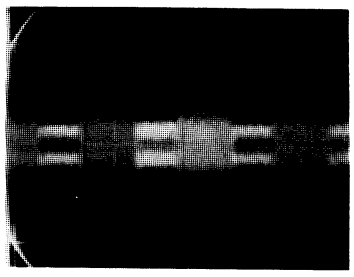
❸ 2V/div 5msec/div REC



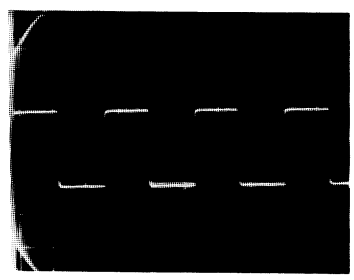
❹ 2V/div 10msec/div REC



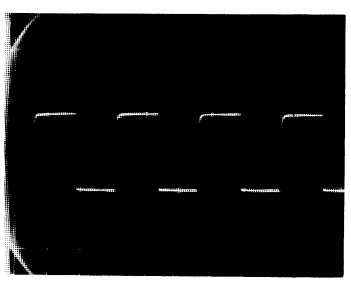
❺ 0.5V/div 5msec/div REC



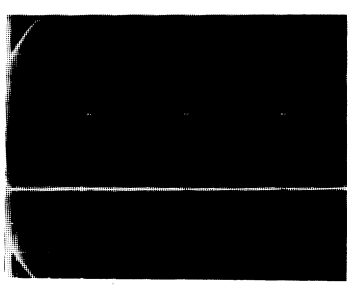
❺ 0.2V/div 0.5 μsec/div PB



❻ 2V/div 10 μsec/div REC/PB



❼ 2V/div 0.5msec/div REC



❽ 2V/div 10msec/div REC

【AUDIO BOARD】

TO BALANCE CONV BOARD CN805 (See page 79)

TO DIGITAL BOARD CN532 (See page 61)

TO DIGITAL BOARD CN533 (See page 62)

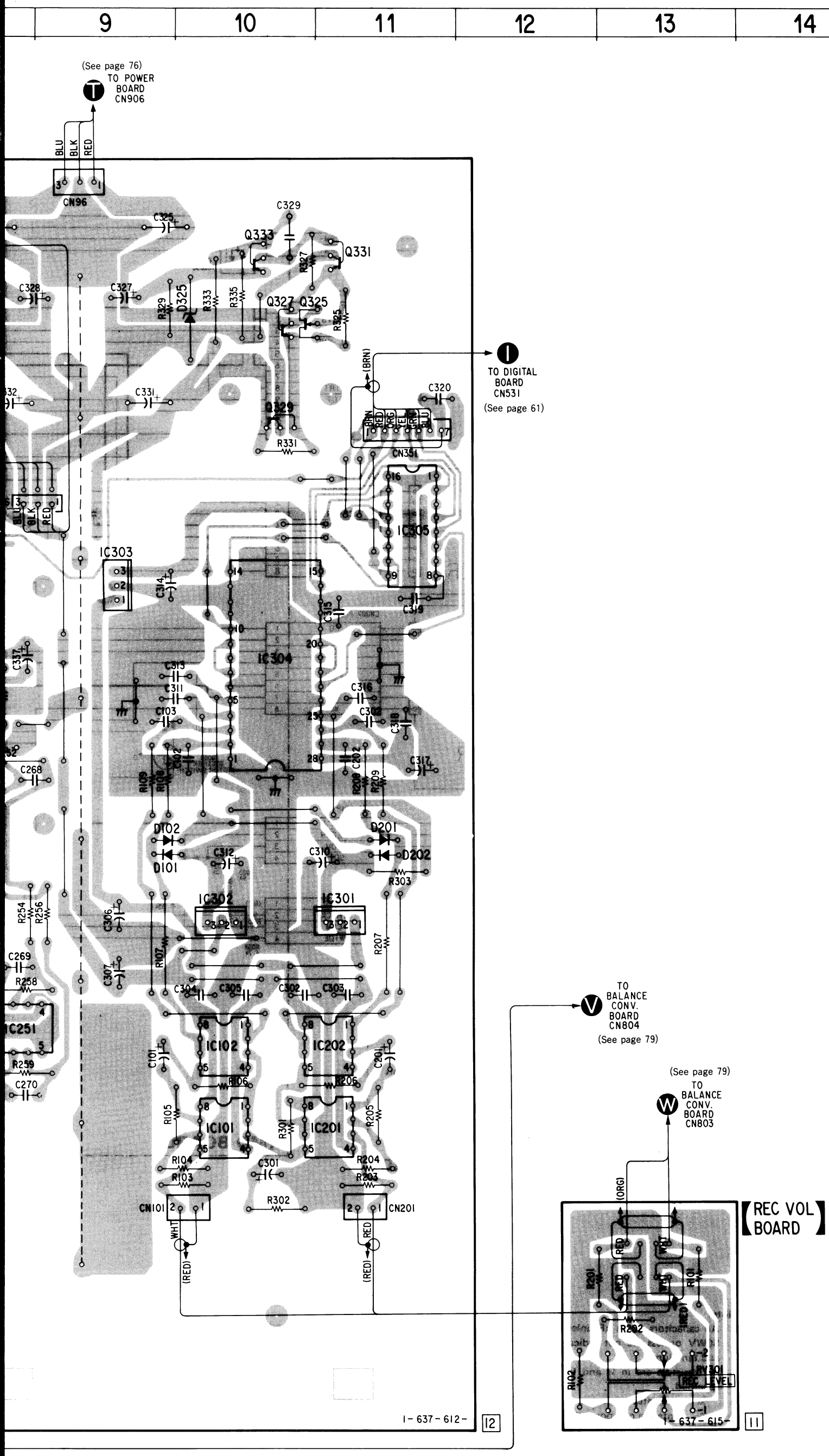
TO DIGITAL BOARD CN537 (See page 62)

TO DIGITAL BOARD CN535 (See page 62)

【HP VOL BOARD】

【HP JACK BOARD】

ation.



• **Semiconductor Location**

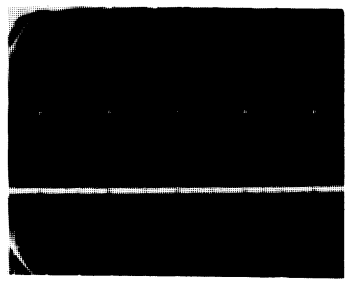
Ref. No.	Location	Ref. No.	Location
D101	F-9	IC305	D-11
D102	F-9	IC348	E-7
D201	F-11	IC350	C-4
D202	F-11	IC351	C-6
D325	B-10	IC354	G-7
D326	B-8	IC355	D-6
D349	D-6	IC356	F-6
D350	F-7	IC357	C-6
D351	E-5	IC358	E-4
D352	D-5	IC359	E-6
D353	H-8		
D354	H-4	Q325	C-10
D355	I-6	Q326	B-7
D356	I-6	Q327	C-10
D357	J-7	Q328	B-7
D358	J-5	Q329	C-10
D359	C-4	Q330	C-7
		Q331	B-11
IC101	H-10	Q332	B-7
IC102	H-10	Q333	B-10
IC151	H-4	Q334	B-7
IC152	H-5	Q350	G-8
IC153	I-5	Q351	E-4
IC201	H-10	Q352	E-5
IC202	H-10	Q353	E-5
IC251	H-8	Q354	J-4
IC252	H-7	Q355	J-4
IC253	I-7	Q356	J-5
IC301	G-11	Q357	J-5
IC302	G-10	Q358	J-4
IC303	D-9	Q359	E-3
IC304	E-10		

Note:

- ○—— : parts extracted from the component side.
- ●—— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.

• AUDIO Section Waveforms

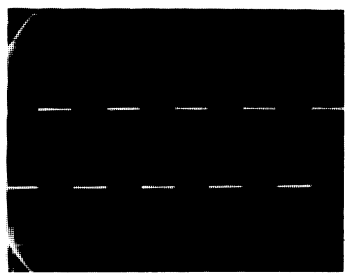
❶ 2V/div 0.2 μ sec/div REC/PB



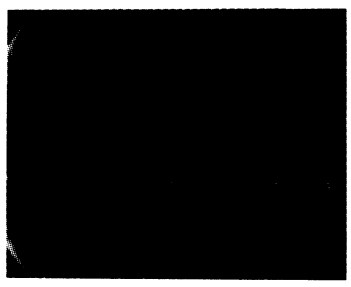
❷ 2V/div 10 μ sec/div REC

❸ 2V/div 0.2 μ sec/div REC/PB

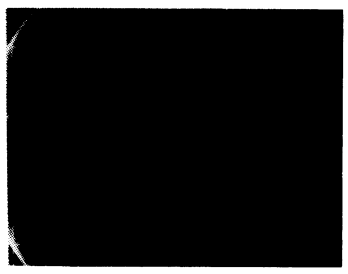
❹ 2V/div 0.1 μ sec/div REC/PB



❺ 2V/div 10 μ sec/div REC

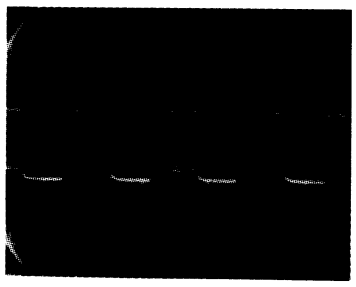


❻ 2V/div 0.1 μ sec/div REC/PB

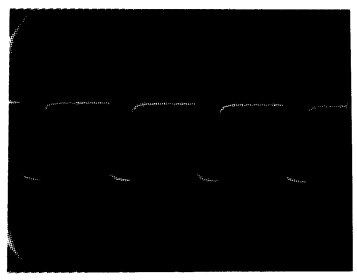


❼ 2V/div 0.1 μ sec/div REC/PB

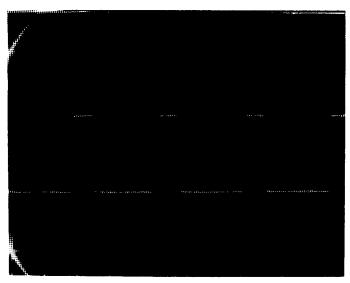
❽ 2V/div 0.1 μ sec/div REC



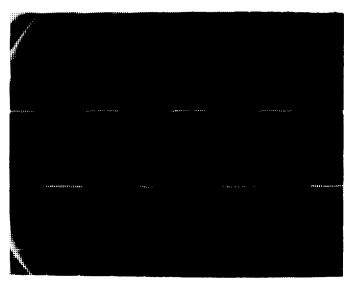
❾ 2V/div 1 μ sec/div REC/PB



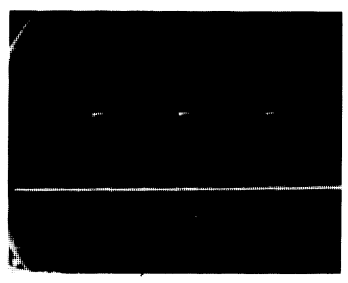
❿ 2V/div 1 μ sec/div REC/PB



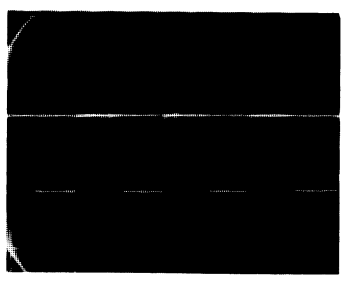
⓫ 2V/div 1 μ sec/div REC/PB



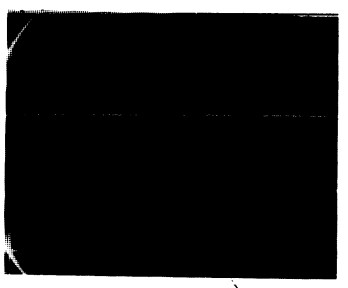
⓬ 2V/div 1 μ sec/div REC



⓬ 2V/div 1 μ sec/div PB



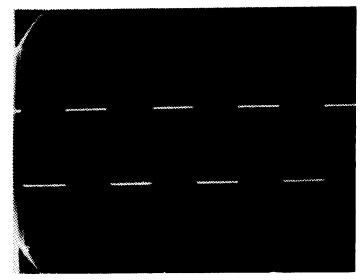
⓭ 2V/div 1 μ sec/div REC



⓭ 2V/div 1 μ sec/div PB

⓮ 2V/div 0.2 μ sec/div REC

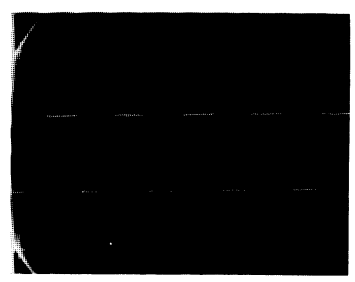
⓯ 2V/div 1 μ sec/div REC



⓰ 2V/div 2 μ sec/div REC

⓱ 2V/div 10 μ sec/div REC

⓲ 2V/div 10 μ sec/div REC

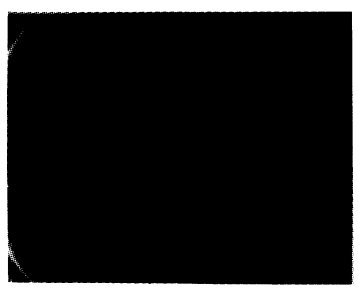


⓳ 2V/div 10 μ sec/div REC

⓴ 2V/div 10 μ sec/div REC

㉑ 1V/div 10 μ sec/div REC

㉒ 2V/div 10 μ sec/div REC/PB



㉓ 2V/div 10 μ sec/div REC/PB

• IC Block Diagrams

IC305 74HC175

IC357 SN74HC393AN

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- % : indicates tolerance.
- △ : internal component.
- : fusible resistor.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- : B+ Line
- : B− Line
- : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : REC/PLAY
  ( ) : PLAY
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path:
  : PB
  : REC

8 9 10 11 12 13 14 15 16 17 18 19

[AUDIO BOARD]

IC101 IC201 M5238P LINE AMP
IC102 IC202 LF412CN BUFFER
IC304 CS5326-KP A/D CONVERTER
IC303 TA7805S REG.
IC301 TA7805S REG.
IC302 TA79005S REG.
IC151 IC251 NE5532P AUDIO AMP
IC354 NE5532P +5V REG
IC355 M5F7805L-720 REG.
IC356 REG.
IC358 PHASE COMPARATOR
IC359 BUFFER
IC348 CXD2552Q-1 D/A CONVERTER
IC357 COUNTER
IC358 TC5081AP
IC357 SN74HC393AN
Q350 2SC2275 +5V REG
Q351 BN1A4M SWITCH
Q352,353 OSC
Q354,355 RELAY DRIVE
RV301 REC LEVEL 50K/50K

7	GND
6	ADPD
5	X128FS
4	BCK
3	ADDT
2	X256FS
1	LR03

CN351 PH 7P

I TO DIGITAL BOARD CN531

(See page 56)

IC305 SN74HC175AN SYNC

C320 0.1μ

3	-UNREG
2	GND
1	+UNREG

CN96 EH 3P

T TO POWER BOARD

(See page 77)

Q329 2SC2275 Q325 2SK246GR1 Q325,327,329 331,333 +15V REG.

Q333 2SC1941-LA Q331 2SA916-L Q334 2SA916-L Q332 2SC1941-LA Q326 2SK246GR1 Q328 2SA916-L Q330 2SA985A Q326,328,330 332,334 -15V REG.

1	+15V
2	GND
3	-15V

CN306

U TO BALANCE CONV BOARD CN805

(See page 80)

IC351 SN74HCU04AN BUFFER

IC350 SM5813APT DIGITAL FILTER

5	GND
4	SOFTMUT
3	MODE RESET
2	XRST
1	DIG-5V

CN355

K TO DIGITAL BOARD CN533

(See page 56)

4	GND
3	XBCK
2	DADT
1	XLRCK

CN352 PH 4P

J TO DIGITAL BOARD CN532

(See page 56)

3	GND
2	F0
1	F1

CN357

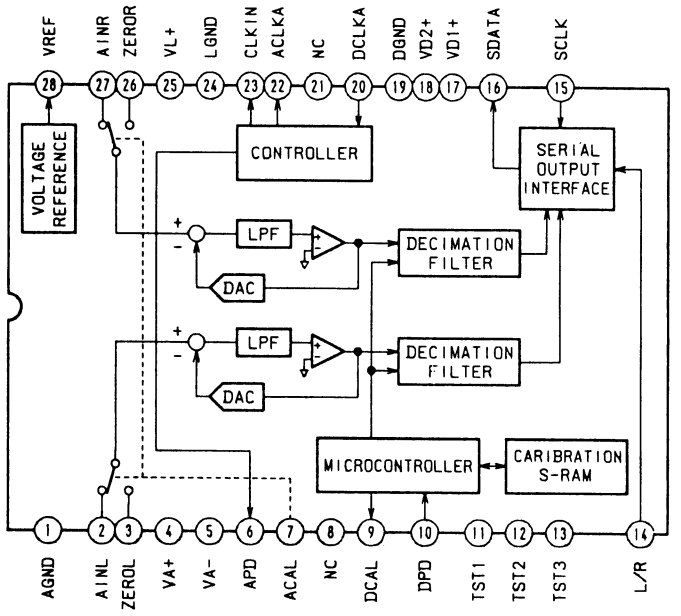
M TO DIGITAL BOARD CN537

(See page 56)

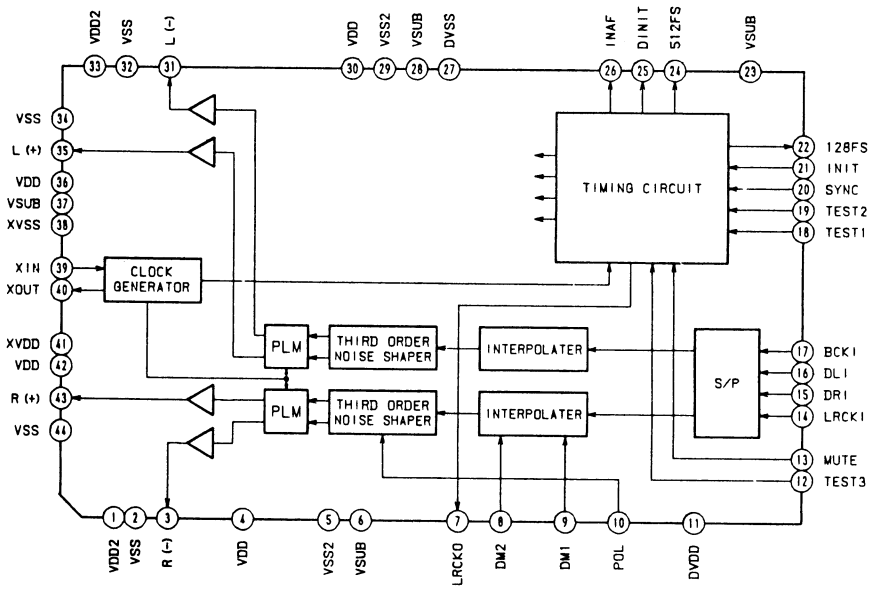
IC351 SN74HCU04 BUFFER

• IC Block Diagrams

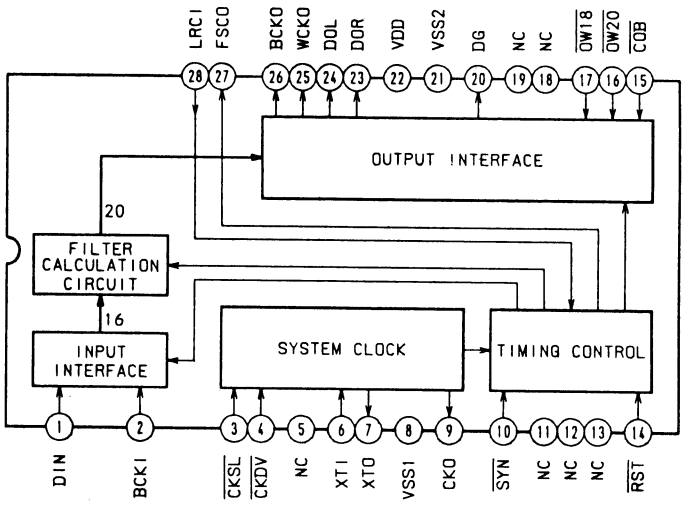
IC304 CS5326-KP



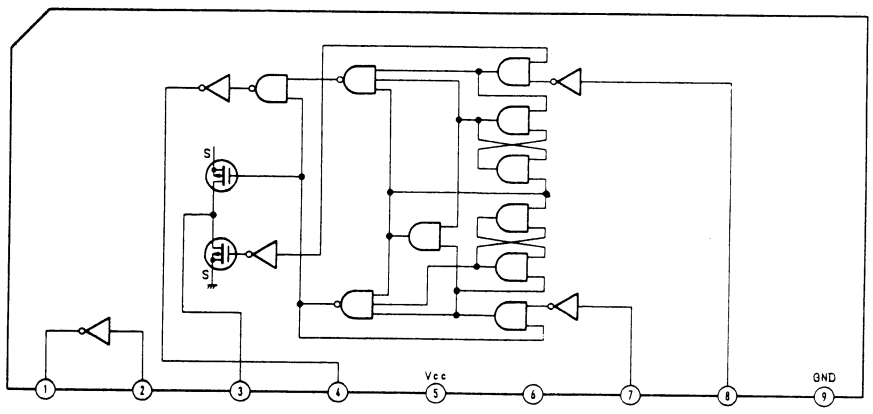
IC348 CXD2552



IC350 SM5813APT



IC358 TC5081AP

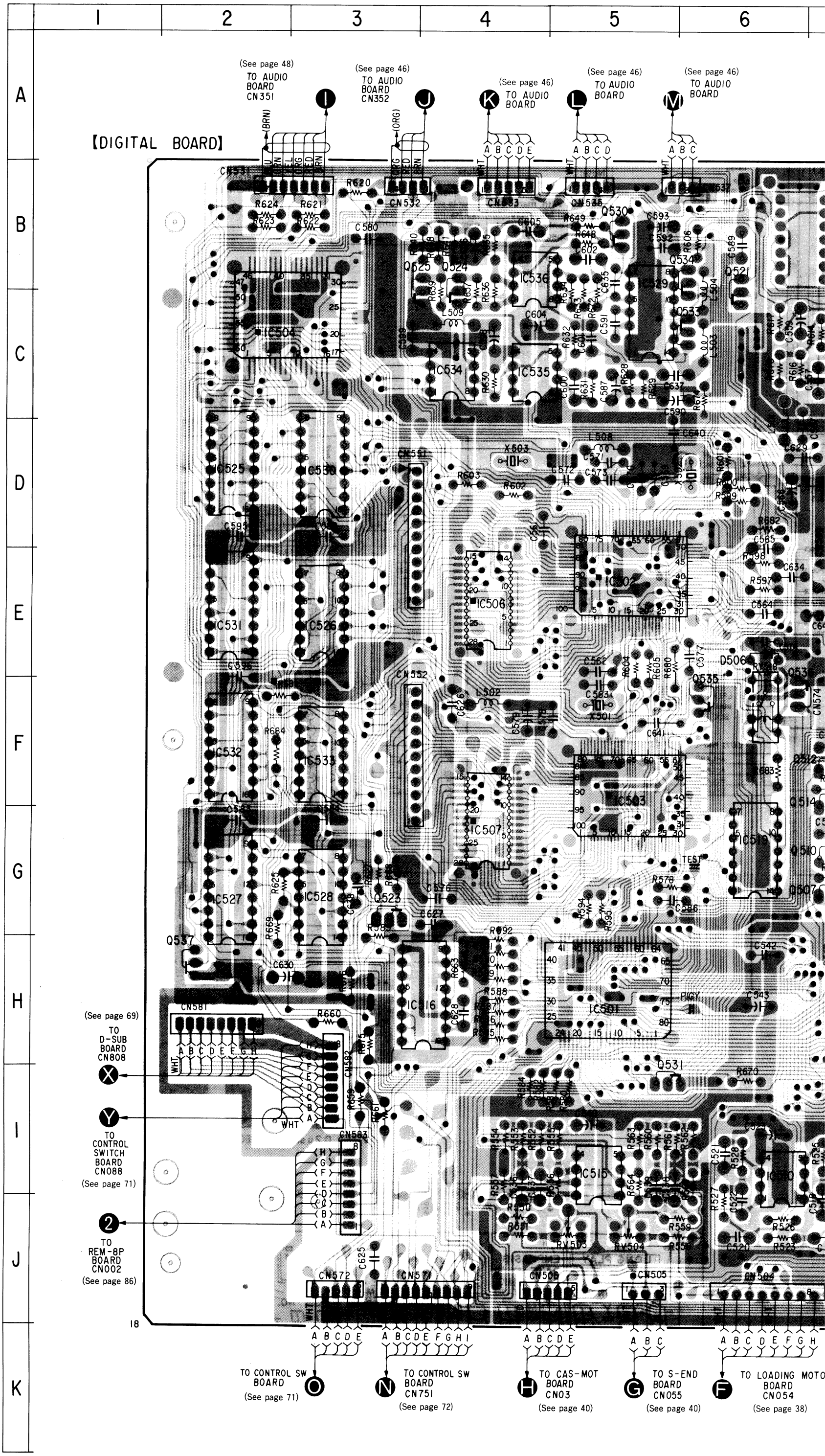


• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D501	G-7	Q501	H-8
D502	G-8	Q502	H-8
D505	E-7	Q503	I-8
D506	E-6	Q504	H-8
		Q505	H-8
IC501	H-5	Q506	I-8
IC502	E-5	Q507	G-7
IC503	F-5	Q509	G-7
IC504	C-2	Q510	G-7
IC505	E-8	Q511	G-7
IC506	E-4	Q512	F-7
IC507	G-4	Q514	F-7
IC508	I-7	Q515	F-7
IC509	H-8	Q516	F-7
IC510	I-6	Q517	G-9
IC511	G-8	Q518	F-9
IC512	I-8	Q519	H-7
IC513	G-8	Q520	H-7
IC514	G-8	Q521	B-6
IC515	I-5	Q523	G-3
IC516	H-4	Q524	B-4
IC517	D-7	Q525	B-3
IC519	G-6	Q526	E-7
IC520	C-8	Q527	D-8
IC521	C-8	Q528	D-8
IC522	C-7	Q530	B-5
IC525	D-2	Q531	I-5
IC526	E-3	Q532	F-8
IC527	G-2	Q533	C-6
IC528	G-3	Q534	B-6
IC529	C-5	Q535	E-6
IC530	D-3	Q536	E-6
IC531	E-2	Q537	H-2
IC532	F-2		
IC533	F-3		
IC534	C-4		
IC535	C-4		
IC536	B-4		

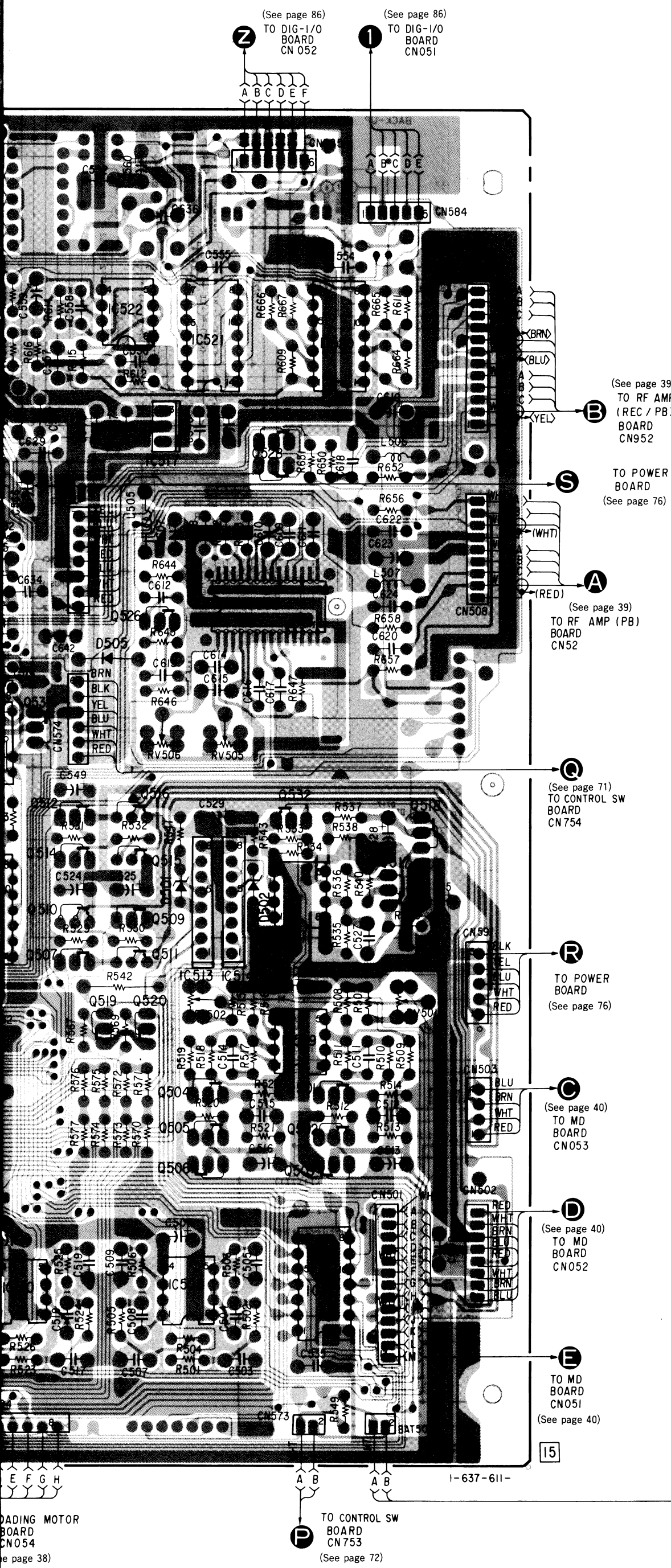
Note:

- ○—— : parts extracted from the component side.
- ●—— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ● : Through hole.
- ▒▒ : Pattern on the side which is seen.
- ▒▒ : Pattern of the rear side.

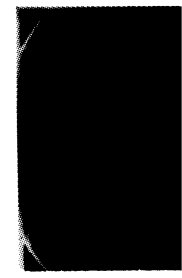


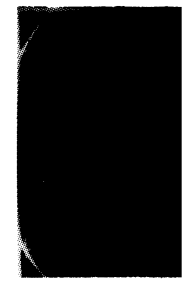
See page 37 for Circuit Boards Location.

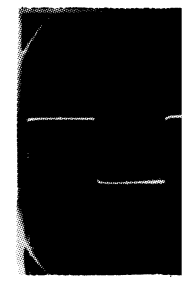
	7	8	9	10	11	12	13



• DIGITAL Sec

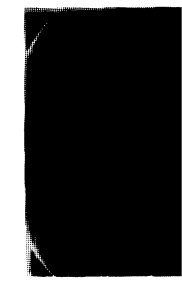

❶ 2V/div 0.1

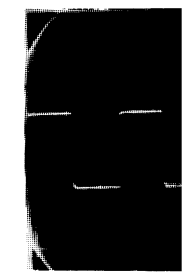

❷ 2V/div 0.2

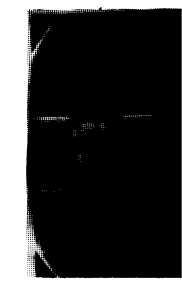

❸ 2V/div 5 µ


❹ 2V/div 5 µ


❺ 2V/div 5 µ


❻ 0.5V/div 0.

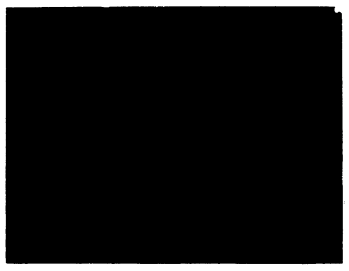

❼ 2V/div 10


❽ 2V/div 5m

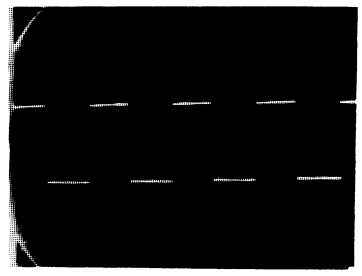

❾ 0.5V/div 5

• DIGITAL Section Waveforms

❶ 2V/div 0.1 μ sec/div REC/PB

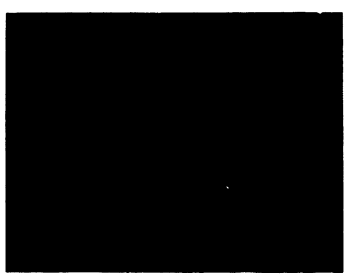


❿ 10V/div 20nsec/div STOP

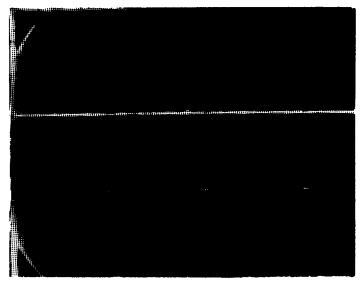


⓳ 2V/div 0.5msec/div REC

❷ 2V/div 0.2 μ sec/div REC

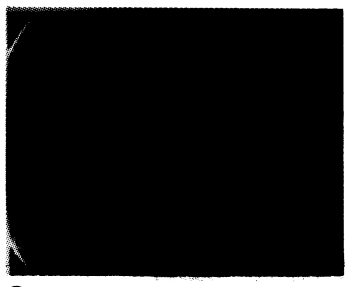


⓫ 10V/div 20nsec/div STOP

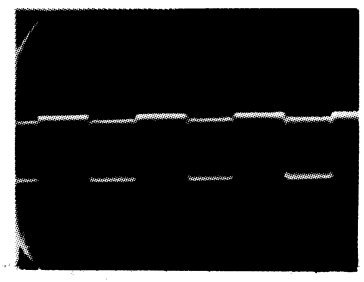


⓴ 2V/div 10msec/div REC

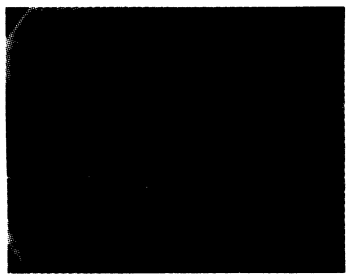
❸ 2V/div 5 μ sec/div REC



⓬ 50mV/div 1 μ sec/div REC

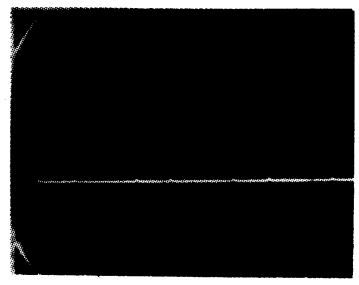


㉑ 1V/div 5msec/div PB

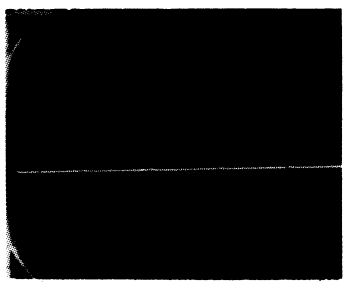


❹ 2V/div 5 μ sec/div REC

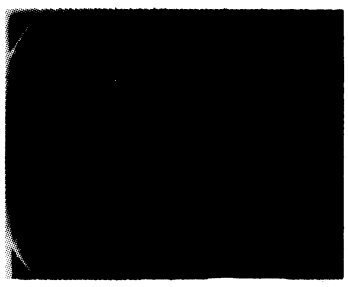
⓭ 2V/div 0.5 μ sec/div REC



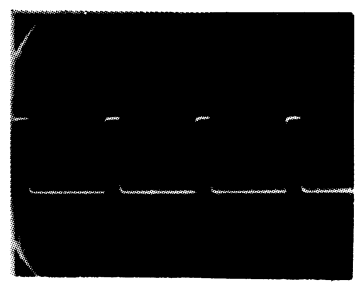
㉒ 2V/div 5msec/div REC



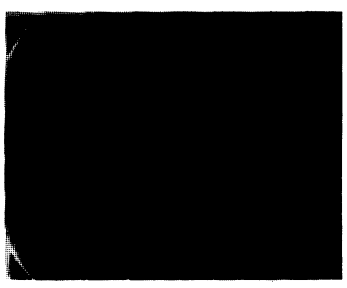
❺ 2V/div 5 μ sec/div REC



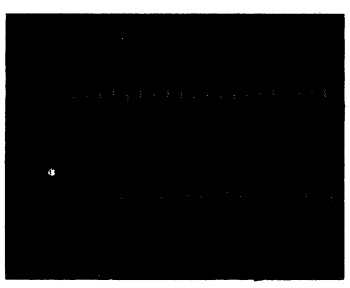
⓮ 2V/div 0.1 μ sec/div REC



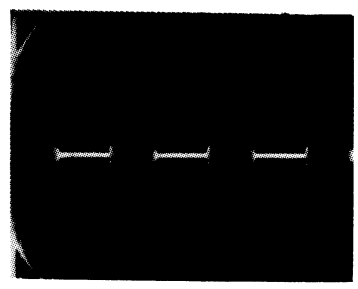
㉓ 2V/div 10 μ sec/div PB



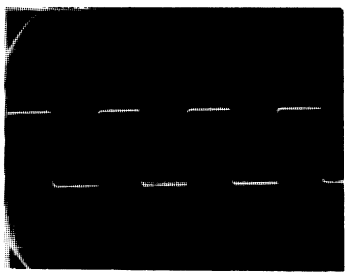
❻ 0.5V/div 0.1 μ sec/div REC



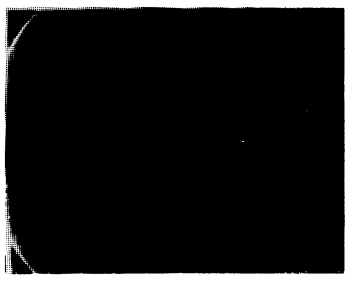
⓯ 10V/div 58nsec/div REC/PB



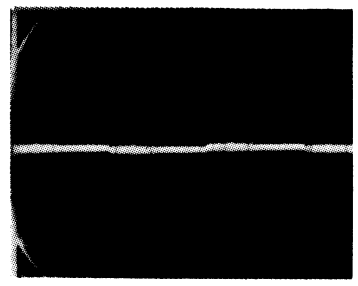
㉔ 0.2V/div 5msec/div PB



❼ 2V/div 10 μ sec/div PB

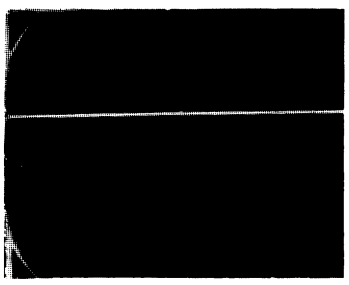


⓰ 2V/div 0.1 μ sec/div REC

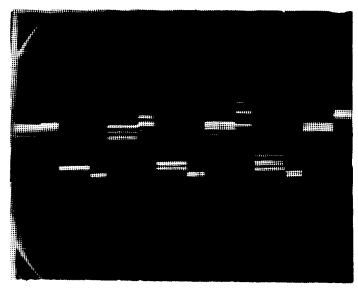


㉕ 0.1V/div 5msec/div PB

❽ 2V/div 5msec/div REC

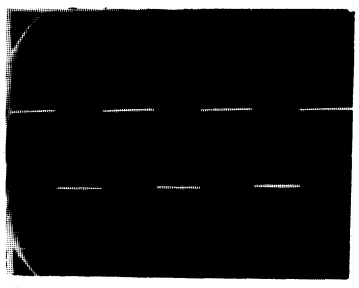


⓱ 2V/div 10msec/div REC



㉖ 0.5V/div 10msec/div PB

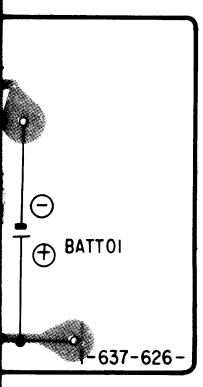
❾ 0.5V/div 5msec/div REC



⓲ 2V/div 0.5msec/div REC

㉗ 1V/div 5msec/div PB

RD】



II

[CONTROL SW BOARD]

Q719–726
FL-GRID-DRIVERS

Q719 DTC143TK
Q720 DTC143TK
Q721 DTC143TK
Q722 DTC143TK
Q723 DTC143TK
Q724 DTC143TK
Q725 DTC143TK
Q726 DTC143TK

FL701 FL-TUBE

IC703 IC704
KEY-SCAN
INPUT-SELECTOR

IC705
REFERENCE-VOLTAGE
R-2R LADDER

IC706
COMPARATER

IC707
OUTPUT
EXPANDER

Q701,702,705–707,709–716
LED-DRIVERS

R701 3.9k (SWA0)
S701 ▲ OPEN/CLOSE
R702 680
S702 ■
R703 820
S704 ▶
R704 1.2k
S705 ◀◀
R705 2.2k
S706 ▶▶
AMS

R706 3.9k (SWA1)
S707 ◀◀
R707 680
S708 ▶▶
R708 820
S709 ● REC
R709 1.2k
S710 ❚❚ PAUSE
R710 2.2k
S711 ○ REC MUTE

R711 3.9k (SWA2)
S712 MODE
R712 680
S713 RESET
R713 820
S714 MEMORY
R714 1.2k
(SA2)
COUNTER

R715 3.9k (SWA3)
S715 RECORDED
R716 680
S716 PRESENT
R717 820
S717 SKIP PLAY
R718 1.2k
(SA3)
DATE

R719 3.9k (SWA4)
S718 FADER
R720 680
S720 REPEAT
R721 820
S722 MARGIN RESET
R722 1.2k
R723 2.2k
(SA4)

R724 3.9k (SWA5)
S723 1
R725 680
S724 2
R726 820
S725 3
R727 1.2k
S726 CLOCK SET
R728 2.2k
(SA5)

R729 3.9k (SWA6)
S727 4
R730 680
S728 5
R731 820
S729 6
R732 1.2k
S730 COPY PROHIBIT (+)
R733 2.2k
S731 CLEAR

R734 3.9k (SWA7)
S732 7
R735 680
S733 8
R736 820
S734 9
R737 1.2k
S735 0 (–)

R739 3.9k (SWB0)
S736 AUTO
R740 680
S737 WRITE
R741 820
S738 WRITE
R742 1.2k
S739 WRITE
R743 2.2k
S740 TIME SEARCH

R744 3.9k (SWB1)
S741 RENUMBER
R745 680
S742 ERASE
R746 820
S743 ERASE
R747 1.2k
S744 ERASE
R748 2.2k
START ID
SKIP ID
END ID

R749 3.9k (SWB2)
R751 3.9k (SWB3)
R753 3.9k (SWB4)
R755 3.9k (SWB5)
R756 680
R757 3.9k (SWB6)
R758 680
R759 3.9k (SWB7)
R760 680

CN088
LED0
LED1
LED4
LED5
SWB3
SWB2
DIG-5V
GND
TO DIGITAL BOARD CN582
(See page 59)

CN773

12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF. 50WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- % : indicates tolerance.
- △ : internal component.
- ⏦ : fusible resistor.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- ▬▬ : B+ Line
- ▬ ▬ : B− Line
- ▭ : adjustment for repair.

IC701 MSC62408 DISPLAY MICRO COMPUTER

IC702 BACK-UP MEMORY 64byte EEPROM

IC712 REAL TIME CLOCK RF5C62 CLOCK GEN. DATA-I/O CONTROL

IC709 DIGITAL-METER CONTROLLER I/O-CONTROL METER LOGIC MSM6338MS-K

IC707 M50782FP

CN753 DA2P
1 BATT
2 GND
Ⓟ TO DIGITAL BOARD CN573 (See page 56)

1 FL-AC
2 FL-AC
3 FL-30V
4 DIG-GND
5 DIG-5V
6 LAMP5V
Ⓠ TO DIGITAL BOARD CN574 (See page 56)

1 DISPCK
2 DISPGND
3 DISPDO
4 EMP
5 DISPDI
6 DISPSY
7 DISPSL
8 ADSWO
9 XRST
Ⓝ TO DIGITAL BOARD CN571 (See page 59)

1 DADT
2 DIG-GND
3 LRCK
4 MMUT
5 BCK
Ⓞ TO DIGITAL BOARD CN572 (See page 59)

CAS-CON-LAMP
CN772 PH4P-L
1 A-LAMP
2 A-LAMP
3 B-LAMP
4 B-LAMP
PL701
PL702

Q717,718,732 LAMP DRIVER
Q717 DTA114EK
Q718 2SD1614
Q732 2SD1614
Q727 2SD1614
Q728 2SC1623
Q730 DTC124EK
Q727,728,730 LED-GND SWTCHING

D713 AA3432S (RENUMBER)
D714 AA3432S (START ID)
D715 AA3432S (SKIP ID)
D716 AA3432S (END ID)
(ORG) (ORG) (ORG) (ORG) ERASE

CN808 ĐA8P
LE00 1
LE01 2
LE04 3
LE05 4
SWB3 5
SEB2 6
+5V 7
GND 8
Ⓧ TO DIGITAL BOARD CN581 (See page 59)

【D-SUB BOARD】

• CONTRO

❶ 1V/div

【SLIDE SW BOARD】

CN773
INPUT-SEL 1
REMOTE 2
REMCON 3
DIG-5V 4
GND 5
R807 2.2k
R808 2.2k
S746 44.1k ⇐48k⇒ DIGITAL INPUT MODE
S749 WIRED ⇐OFF⇒ WIRELESS REMOTE

【OPTICAL RECEIVE BOARD】

IC711 A1QH3020S REMOCON SENSOR
REMO-CON 1
DIG-5V 2
DIG-GND 3

【PUSH SW BOARD】

CN778
REC-MODE 1
INPUT MONITOR 2
DIG-GND 3
S750 INPUT MONITOR INPUT ⇕ REPRO
S747 REC MODE STANDARD ⇕ LONG

FL701 INTERNAL CONNECTION

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- % : indicates tolerance.
- △ : internal component.
- : fusible resistor.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- ▬▬ : B+ Line
- ▬ ▬ ▬ : B− Line
- ▭ : adjustment for repair.

- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : REC/PLAY
  ( ) : PLAY
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.

CN753
DA2P
1 BATT
2 GND
P
TO DIGITAL BOARD CN573
(See page 56)

1 FL-AC
2 FL-AC
3 FL-30V
4 DIG-GND
5 DIG-5V
6 LAMP5V
Q
TO DIGITAL BOARD CN574
(See page 56)

1 DISPCK
2 DISPGND
3 DISPDO
4 EMP
5 DISPDI
6 DISPSY
7 DISPSL
8 ADSWO
9 XRST
N
TO DIGITAL BOARD CN571
(See page 59)

1 DADT
2 DIG-GND
3 LRCK
4 MMUT
5 BCK
O
TO DIGITAL BOARD CN572
(See page 59)

CAS-CON-LAMP
CN772 PH4P-L
1 A-LAMP
2 A-LAMP
3 B-LAMP
4 B-LAMP
③ PL701
③ PL702

(See page 84)
3
TO REM-8P BOARD CN 001

3 GND
2 STOP
1 PLAY
CN810
DA3P

【 D-SUB BOARD 】

IC808
TD62382AP
BUFFER
IC809
TD62382AP
BUFFER
R882 680
R883 820
R887 680
R888 820
R890 2.2k
R889 1.2k
R885 2.2k
R884 1.2k
R891 10k
R892 10k
R893 10k
R894 10k
4.9
C884 1000p
C885 1000p
C886 1000p
C887 1000p
C888 1000p
C889 1000p
C890 1000p
C891 1000p
C892 1000p
C881 100 6.3V
C882 0.1 TF

GND
GND
KEY ■
KEY ▶▶
LED ▶
KEY ▶
KEY ◀◀
LED ❚❚
KEY ❚❚
LED IN
KEY IN
LED ●
KEY ●
KEY ▶▶|
KEY |◀◀
+5V

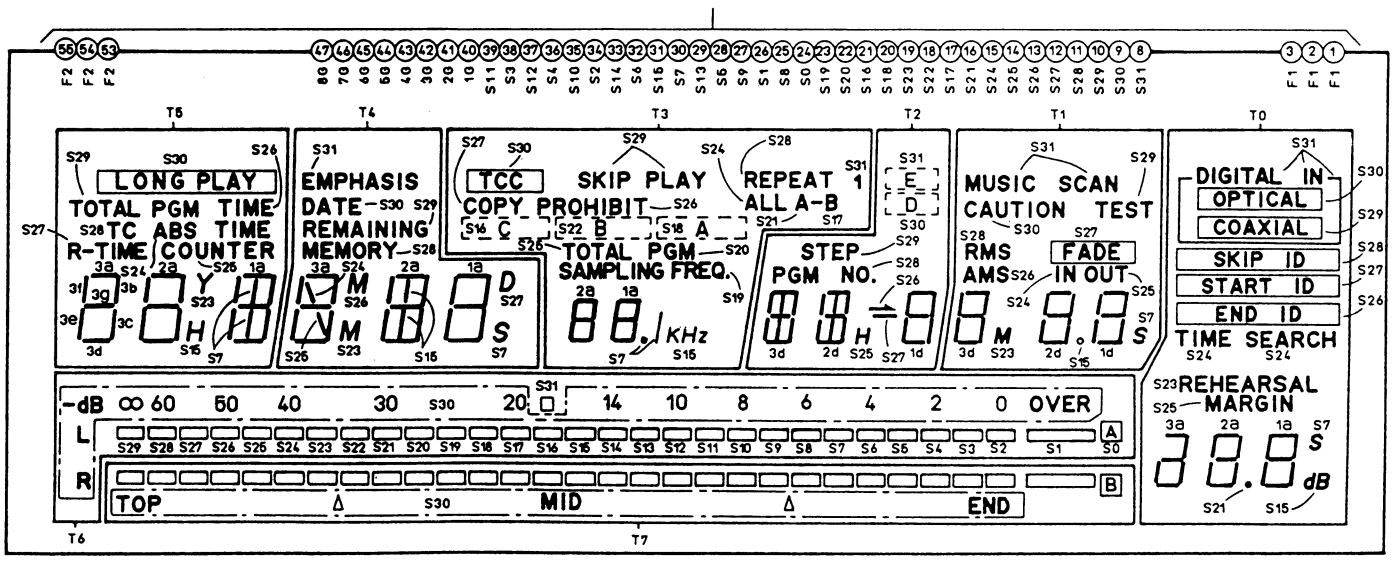
J805
D-SUB 37P
REMOTE

CN808
DA8P
LED0 1
LED1 2
LED4 3
LED5 4
SWB3 5
SEB2 6
+5V 7
GND 8
X
TO DIGITAL BOARD CN581
(See page 59)

• CONTROL Section Waveforms

❶ 1V/div 0.2 μ sec/div REC

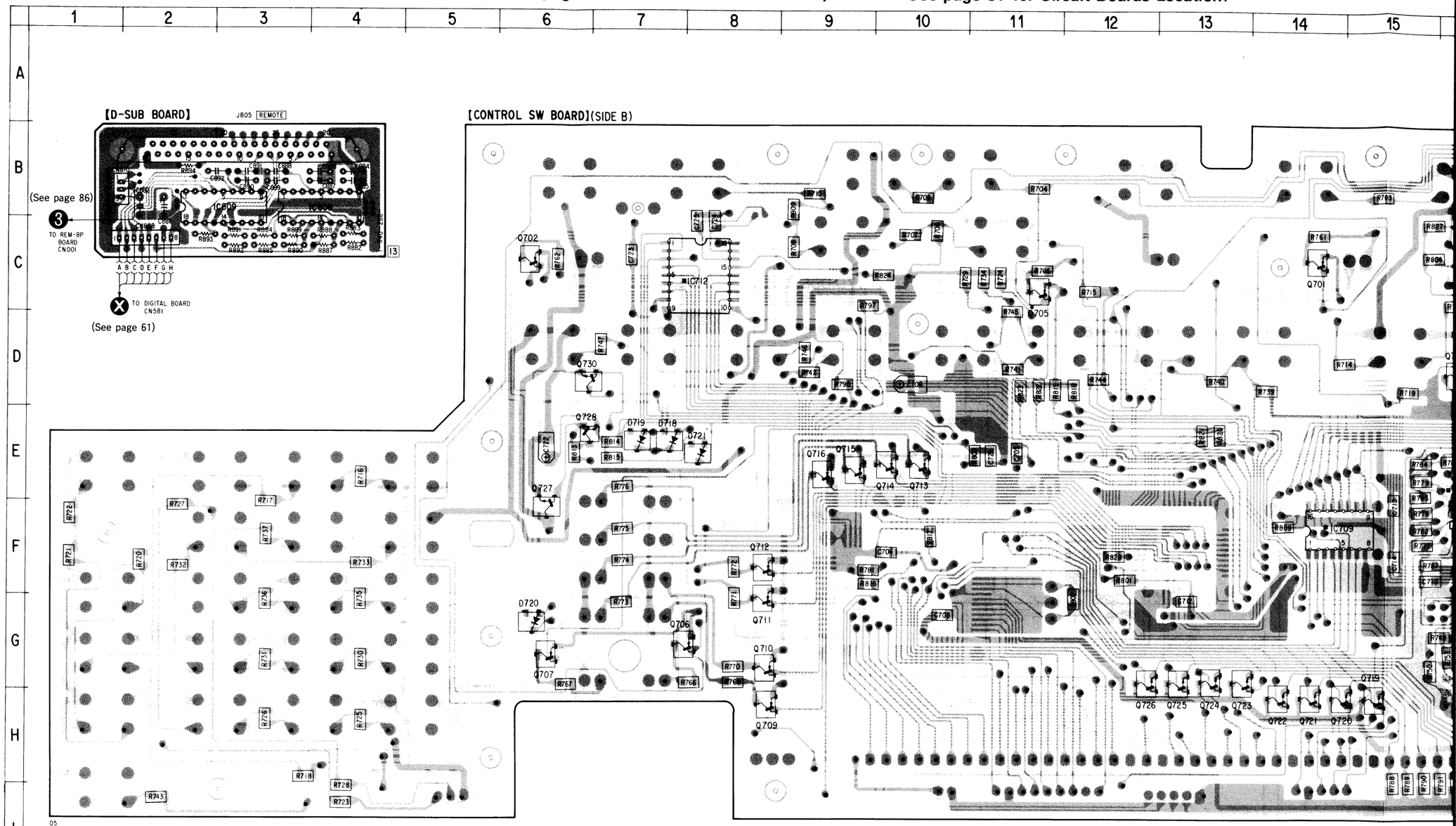
❷ 0.5V/div 10 μ sec/div REC



FL701 INTERNAL CONNECTION

• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D701	C-23	Q701	C-14
D702	C-31	Q702	C-6
D705	C-25	Q705	C-11
D706	G-30	Q706	G-7
D707	G-31	Q707	G-6
D709	G-30	Q709	H-8
D710	F-30	Q710	G-8
D711	F-30	Q711	G-8
D712	E-30	Q412	F-8
D713	G-31	Q713	E-10
D714	F-31	Q714	E-10
D715	F-31	Q715	E-9
D716	E-31	Q716	E-9
D718	E-7	Q717	D-16
D719	E-7	Q718	C-16
D720	G-6	Q719	H-15
D721	E-8	Q720	H-14
		Q721	H-14
IC701	F-28	Q722	H-14
IC702	F-26	Q723	G-13
IC703	G-21	Q724	G-13
IC704	G-16	Q725	G-13
IC705	F-21	Q726	G-12
IC706	F-16	Q727	F-6
IC707	F-25	Q728	E-6
IC709	F-14	Q730	D-6
IC711	B-34	Q732	C-16
IC712	C-8		
IC808	B-3		
IC809	B-2		



Note:

- ○—— : parts extracted from the component side.
- ●—— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ● : Through hole.
- ▒ : Pattern on the side which is seen.
- : Pattern of the rear side.

(See page 61)

TO DIGITAL BOARD CN582

【CONTROL SW BOARD】(SIDE A)

SW701 OPEN/CLOSE
SW702 ■
SW704 ▶
SW710 ❚❚ PAUSE
SW705 ⏮ AMS SW706 ⏭
SW711 REC MUTE
SW709 REC
SW707 ◀◀
SW708 ▶▶
CT701
X702
D702
D701
D705
CN772
R806
R805
PL702 CAS-CON-LAMP
PL701
COUNTER
SW712 MODE
SW713 RESET
SW714 MEMORY
START ID
SW736 AUTO
S741 RENUMBER
S737 WRITE
S742 ERASE
SKIP ID
S738 WRITE
S743 ERASE
END ID
SW739 WRITE
SW744 ERASE
IC705
IC709
IC704
IC703
IC707
IC702
IC701
D712 (END)
D716 (END)
D711 (SKIP) WRITE
D715 (SKIP) ERASE
D710 (START)
D714 (START)
D709 (AUTO)
D713 (RENUMBER)
D706 (INPUT)
D707 (REPRO)
TEST
FL701 FL TUBE
CN773
BLK YEL BLU WHT RED

Q TO DIGITAL BOARD CN574
(See page 63)

O TO DIGITAL BOARD CN572
(See page 61)

N TO DIGITAL BOARD CN571
(See page 61)

P TO DIGITAL BOARD CN573
(See page 62)

【PUSH SW BOARD】
CN778
S747 REC MODE
STANDARD
LONG

1-637-607-

19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37

[CONTROL SW BOARD] (SIDE A)

SW701 OPEN/CLOSE
SW702 ■
SW704 ▶
SW710 ❚❚ PAUSE
SW705 ⏮ AMS
SW706 ⏭
SW711 REC MUTE
SW709 ● REC
SW707 ◀◀
SW708 ▶▶
CT701
X702
D701
D705
D702
CN772
BLK
BLK
BLK
BLK
R806
R805
COUNTER
SW712 MODE
SW713 RESET
SW714 MEMORY
SW736 AUTO
S741 RENUMBER
S737 WRITE
START ID
S742 ERASE
S738 WRITE
S743 ERASE
SKIP ID
SW739 WRITE
SW744 ERASE
END ID
IC705
IC707
IC702
IC703
IC701
D712 (END)
D716 (END)
D711 (SKIP) WRITE
D715 (SKIP) ERASE
D710 (START)
D714 (START)
D709 (AUTO)
D713 (RENUMBER)
D706 (INPUT)
D707 (REPRO)
TEST
FL701 FL TUBE
CN773
YEL BLU WHT RED
TO DIGITAL BOARD CN574 (See page 63)
TO DIGITAL BOARD CN572 (See page 61)
TO DIGITAL BOARD CN571 (See page 61)
TO DIGITAL BOARD CN573 (See page 62)

S715 RECORDE — DATE — S716 PRESENT — S726 CLOCK SET
S722 MARGIN RESET
S731 CLEAR
S735 (-)
S730 COPY PROHIBIT(+)
S718 FADER
S732 7
S733 8
S734 9
S717 SKIP PLAY
S727 4
S728 5
S729 6
S720 REPEAT
S723 1
S724 2
S725 3
S740 TIME SEARCH
1-637-607- 13

[OPTICAL RECEIVE BOARD]
WHT
GND
+5V 03
OUT 02
GND 01
IC711
1-637-609- 11

[SLIDE SW BOARD]
S746 INPUT MODE
DIGITAL ⇐ 48K ⇒ 44.1K
R807
S749 REMOTE
R808
WIRED ⇐ OFF ⇒ WIRELESS
WHT
1-637-608- 11

[PUSH SW BOARD]
WHT
CN778
S747 REC MODE
STANDARD
LONG
S750 INPUT MONITOR
INPUT
REPRO
1-637-610- 11

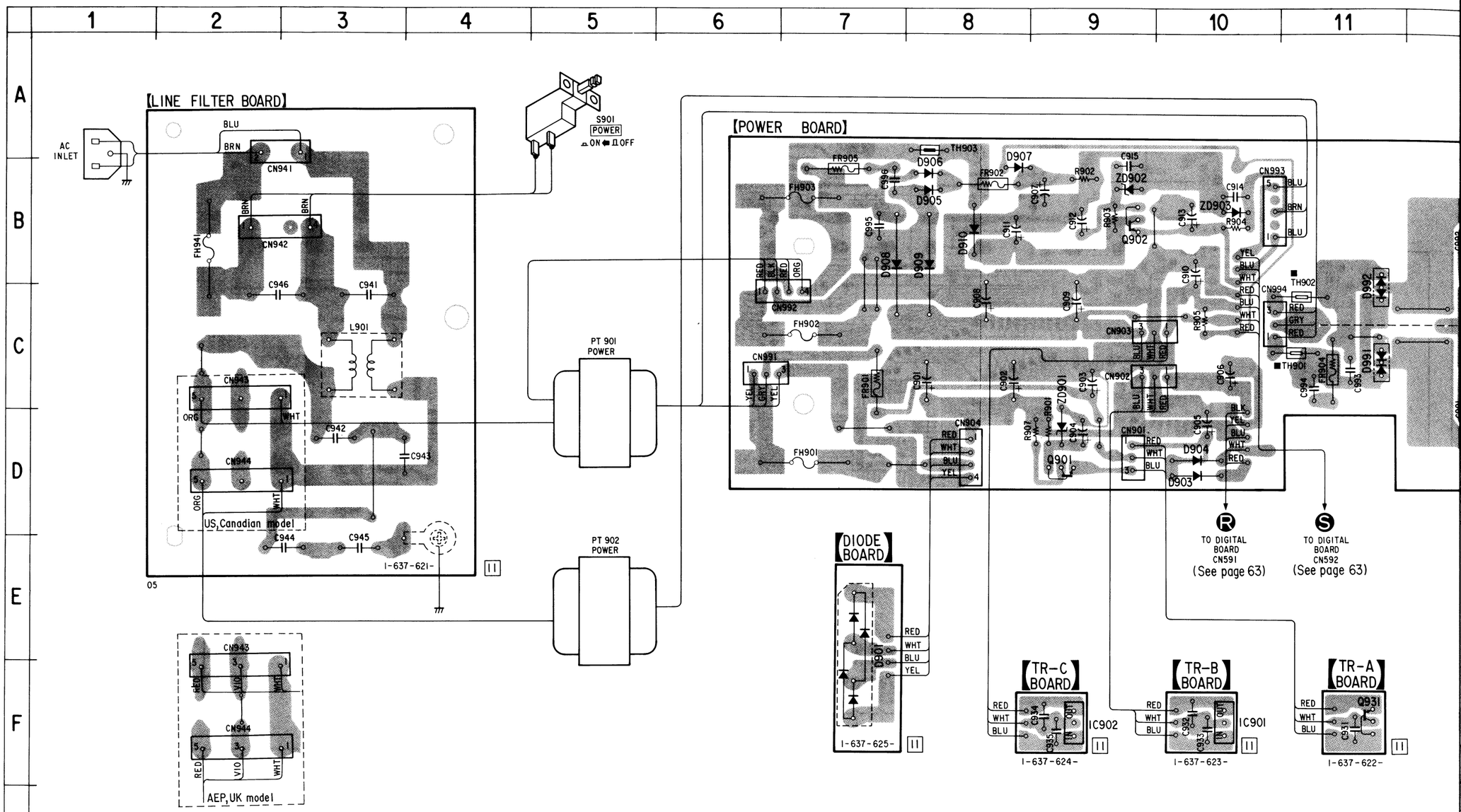
5-13. PRINTED WIRING BOARDS —POWER Section—

• See page 35 for Semiconductor Lead Layouts.

• See page 37 for Circuit Boards Location.

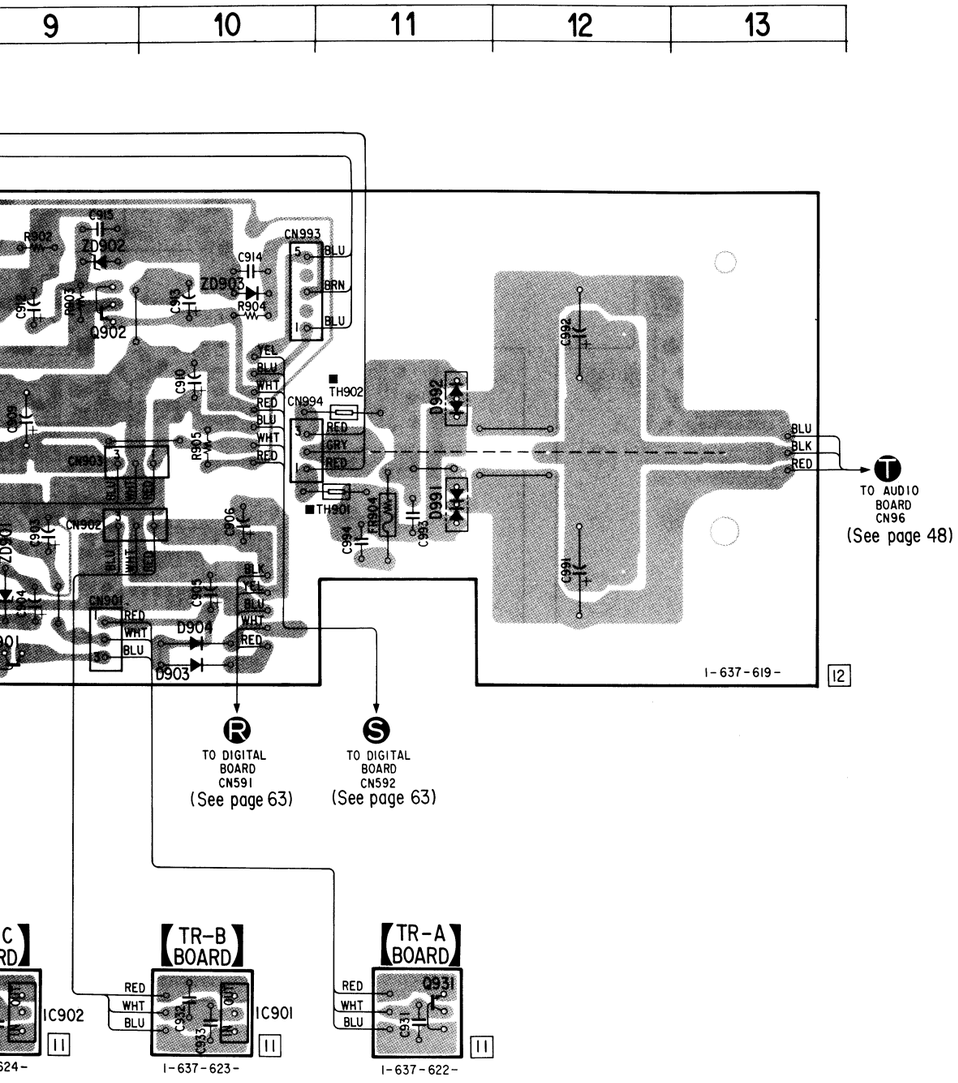
• **Semiconductor Location**

Ref. No.	Location
D901	E-7
D903	D-10
D904	D-10
D905	B-8
D906	B-8
D907	B-8
D908	B-7
D909	B-8
D910	B-8
D991	C-11
D992	C-11
ZD901	D-9
ZD902	B-9
ZD903	B-10
IC901	F-10
IC902	F-9
Q901	D-9
Q902	B-9
Q931	F-11

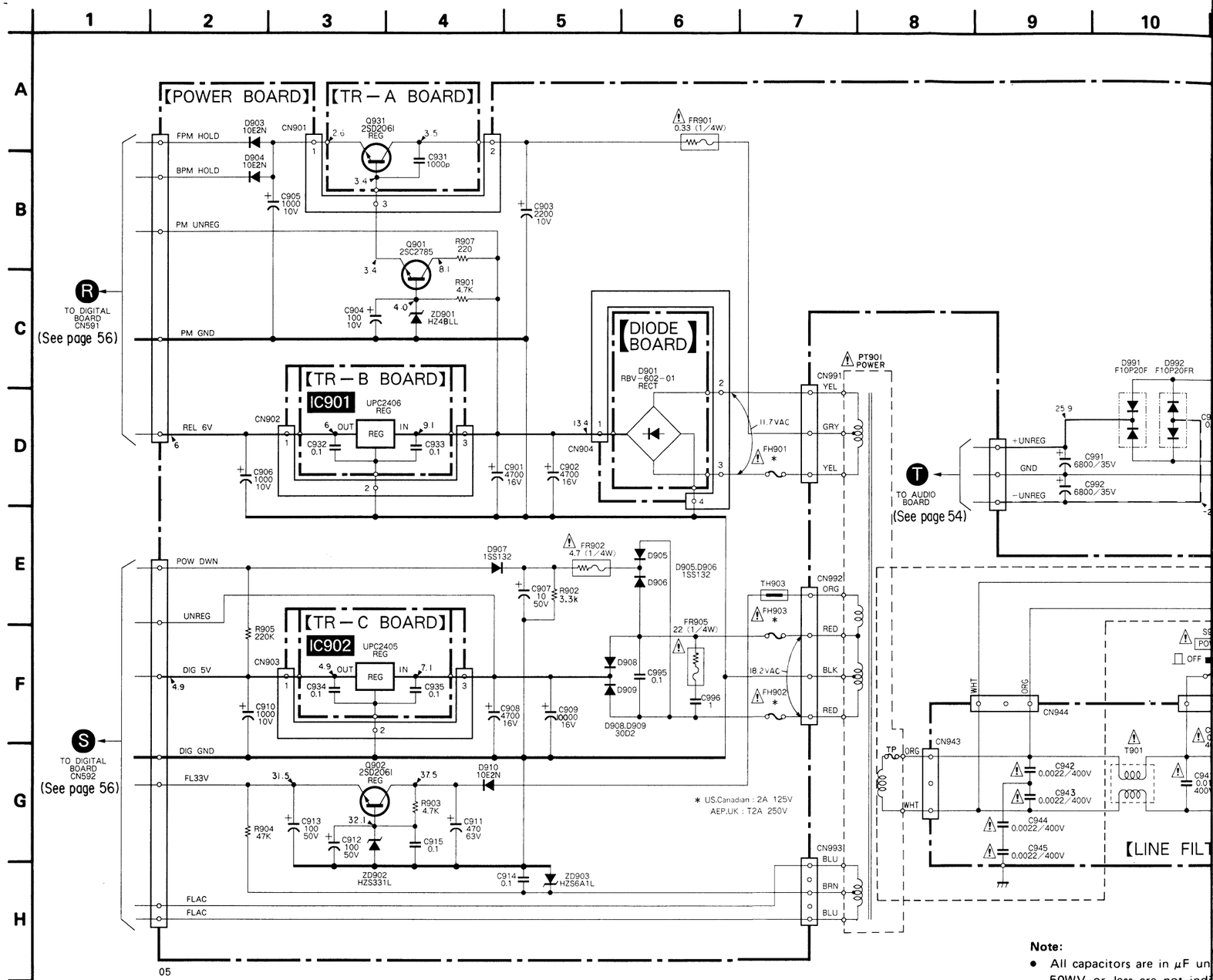


Note:

- ○—— : parts extracted from the component side.
- ●—— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.



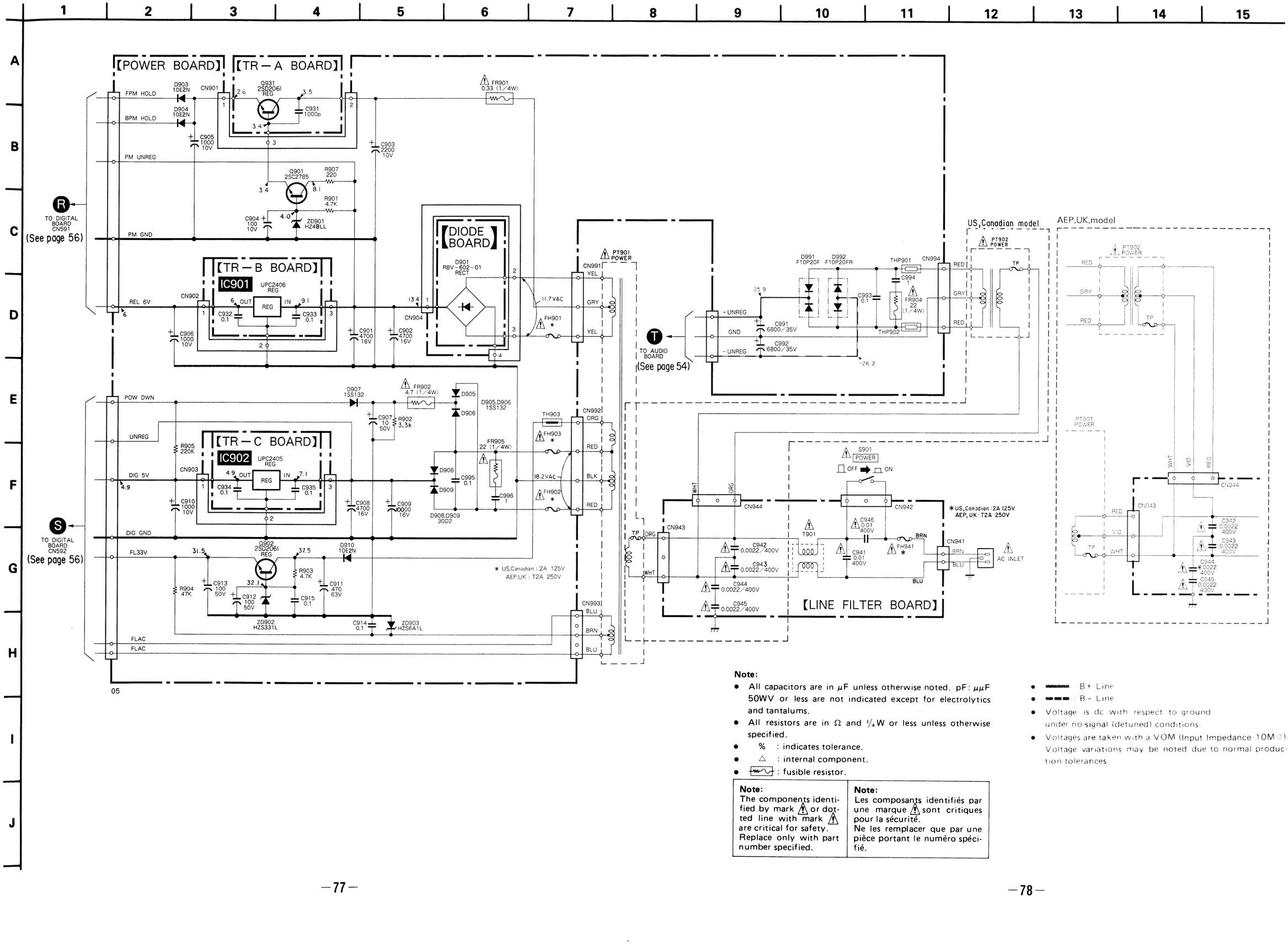
5-14. SCHEMATIC DIAGRAMS —POWER Section—



Note:

- All capacitors are in μF un
  50WV or less are not indi
  and tantalums.
- All resistors are in Ω and
  specified.
- % : indicates tolerance.
- △ : internal component
- : fusible resistor.

Note:	**N**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	L u p N pi fi



Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- % : indicates tolerance.
- △ : internal component.
- : fusible resistor.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

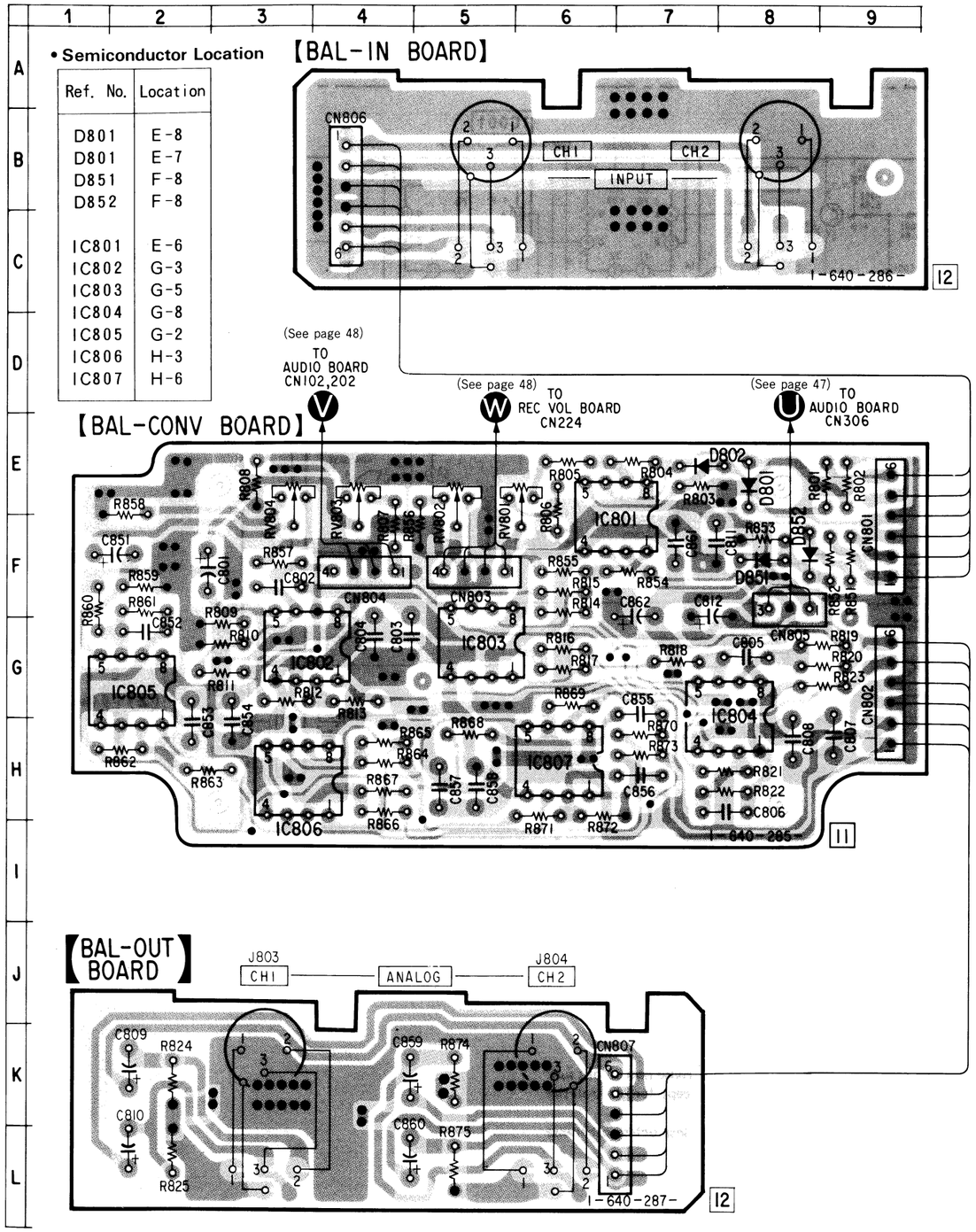
- : B+ Line
- : B- Line
- Voltage is dc with respect to ground under no signal (detuned) conditions.
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.

5-15. PRINTED WIRING BOARDS —ANALOG IN/OUT Section—

- See page 35 for Semiconductor Lead Layouts.
- See page 37 for Circuit Boards Location.

- Semiconductor Location

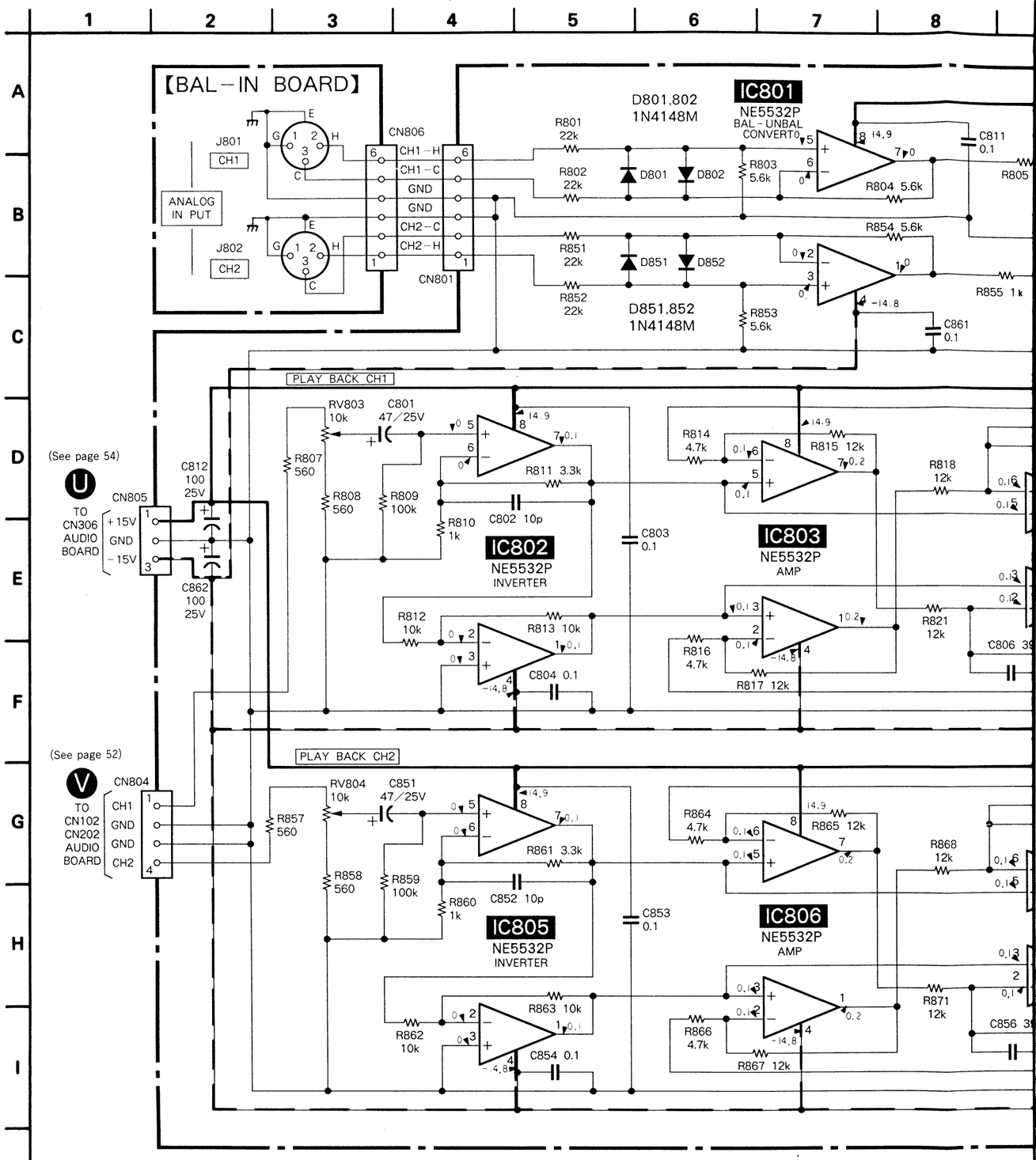
Ref. No.	Location
D801	E-8
D801	E-7
D851	F-8
D852	F-8
IC801	E-6
IC802	G-3
IC803	G-5
IC804	G-8
IC805	G-2
IC806	H-3
IC807	H-6



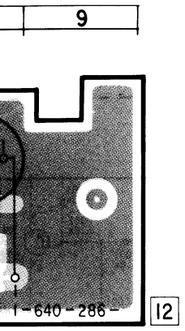
Note:

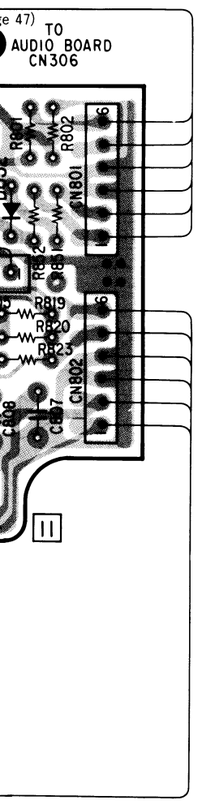
- ○—— : parts extracted from the component side.
- ●—— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ● : Through hole.
- : Pattern on the side which is seen.
- : Pattern of the rear side.

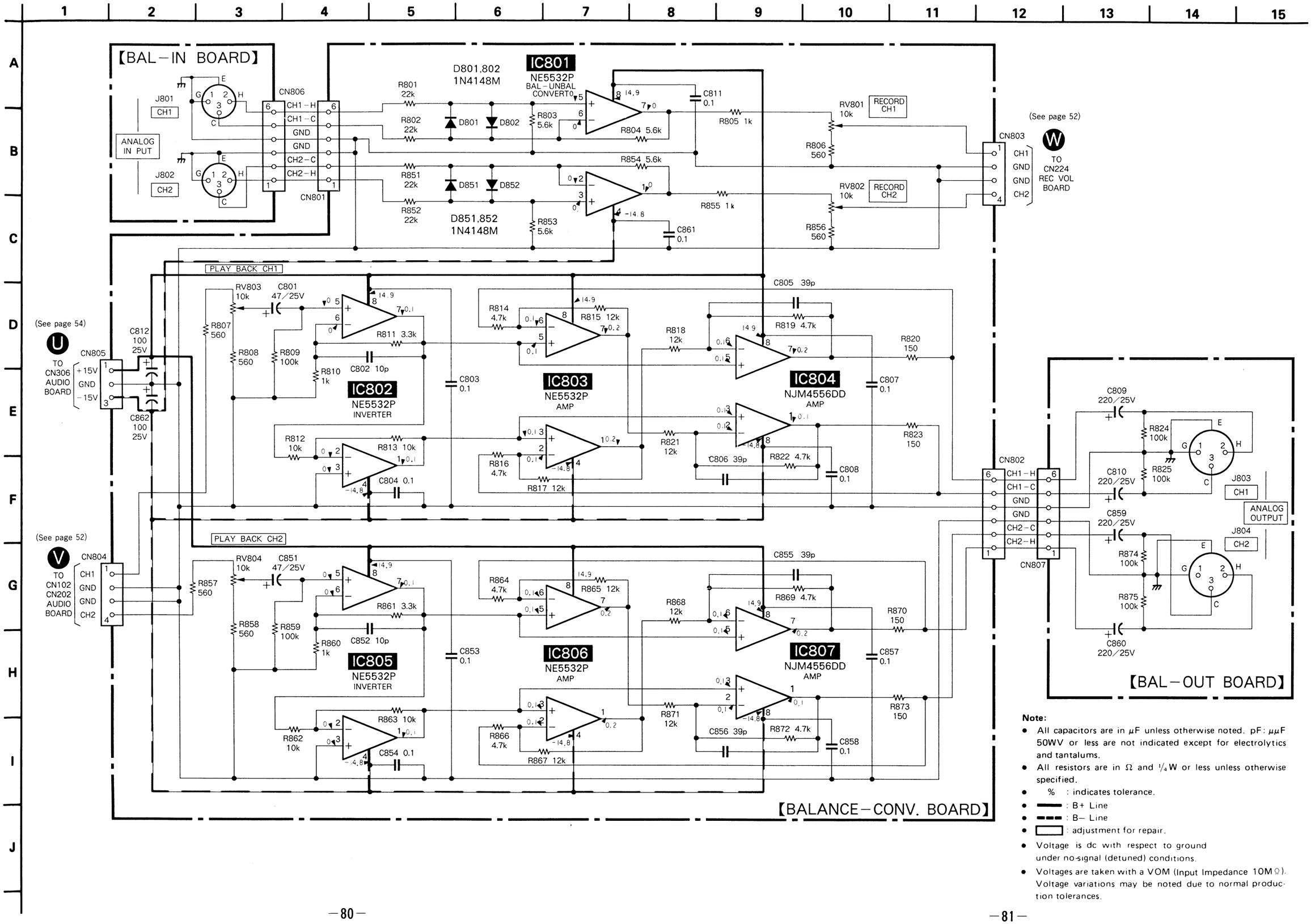
5-16. SCHEMATIC DIAGRAMS —ANALOG IN/OUT Section—



5-16. SCHEMATIC DIAGRAMS —ANALOG IN/OUT Section—







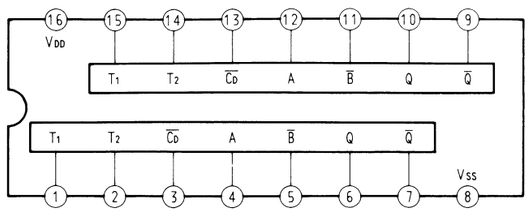
Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- % : indicates tolerance.
- ▬▬ : B+ Line
- ▬ ▬ : B− Line
- ▭ : adjustment for repair.
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.

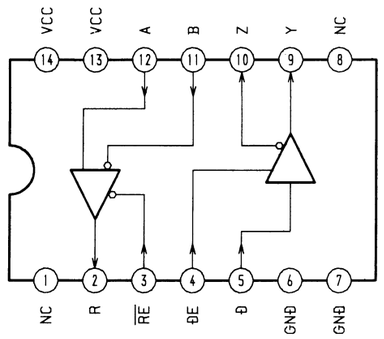
5-17. SCHEMATIC DIAGRAMS —DIGITAL IN/OUT, REMOTE IN Section—

• **IC Block Diagrams**

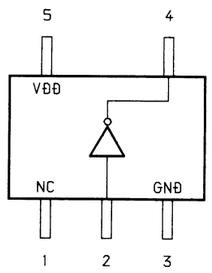
IC001, 002 MC14538BF

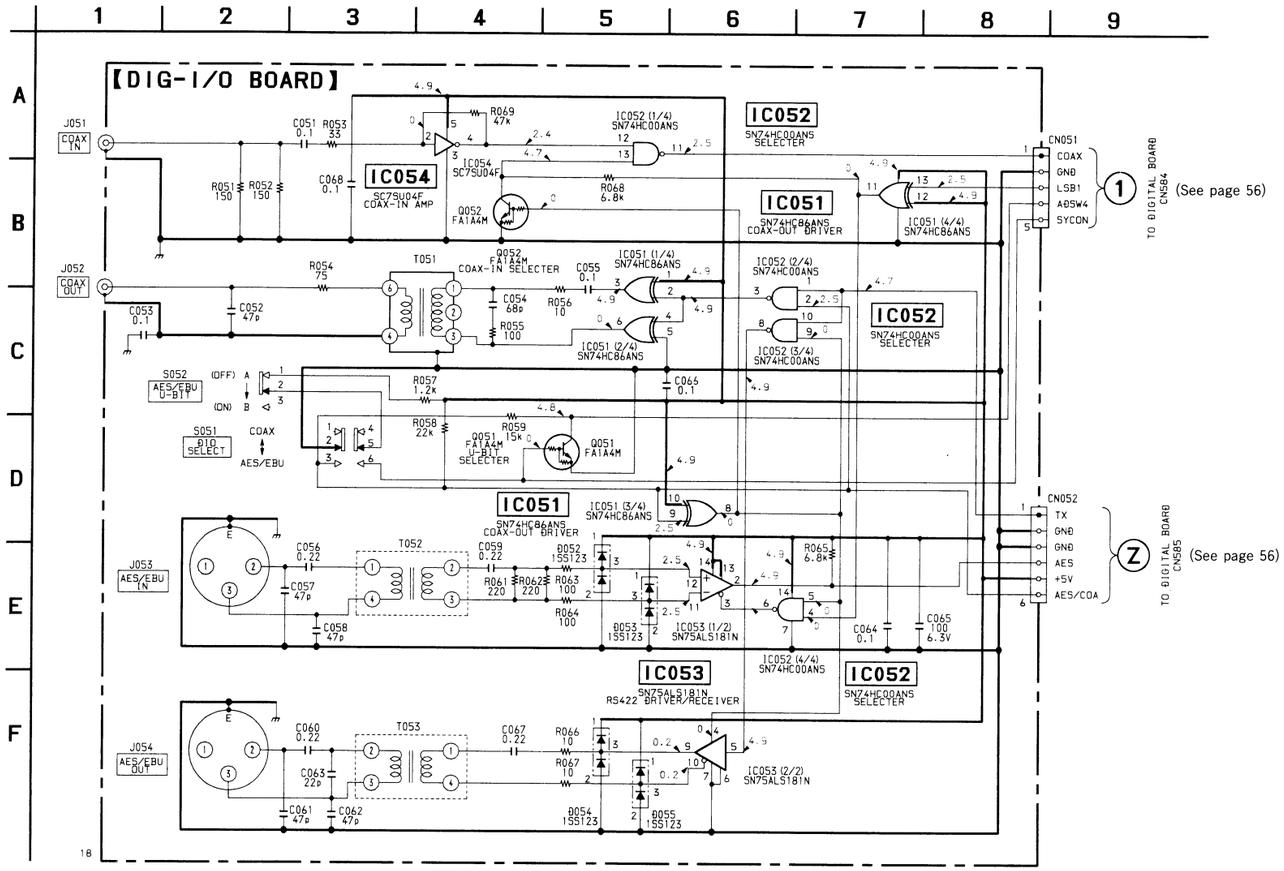


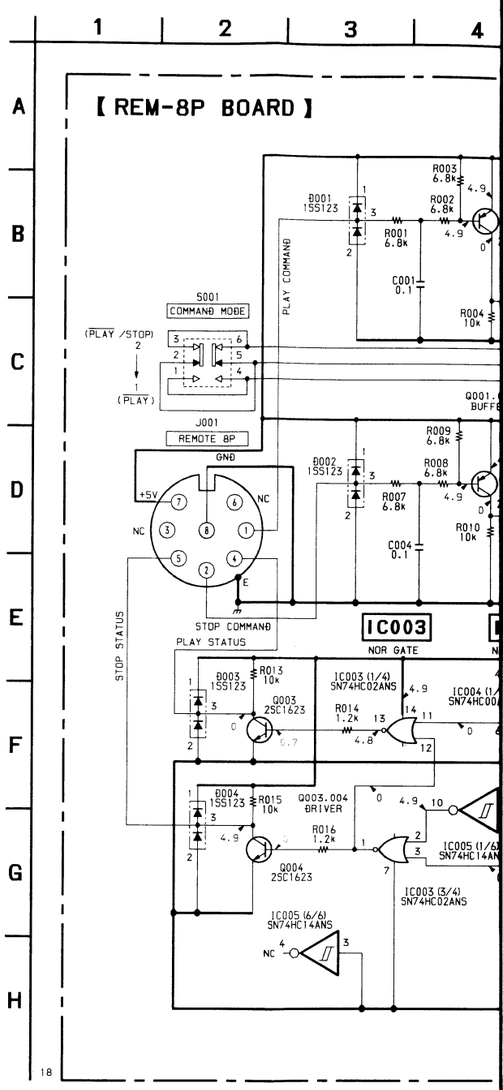
IC053 SN75ALS181N



IC054 SC7SU04F

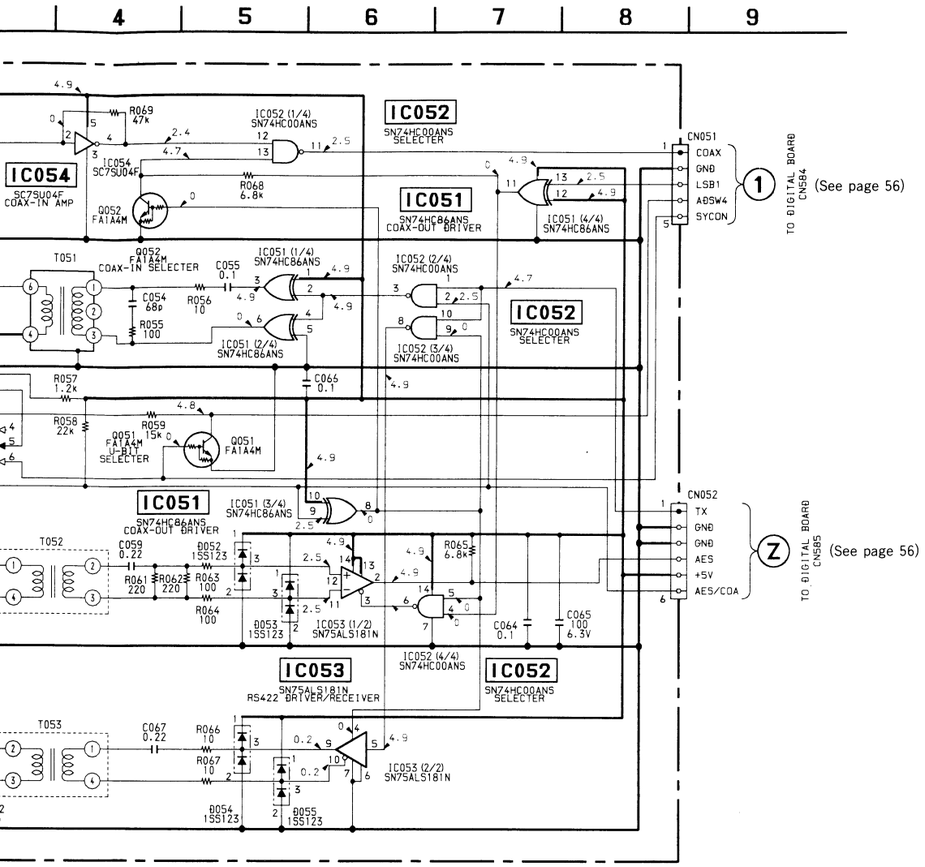


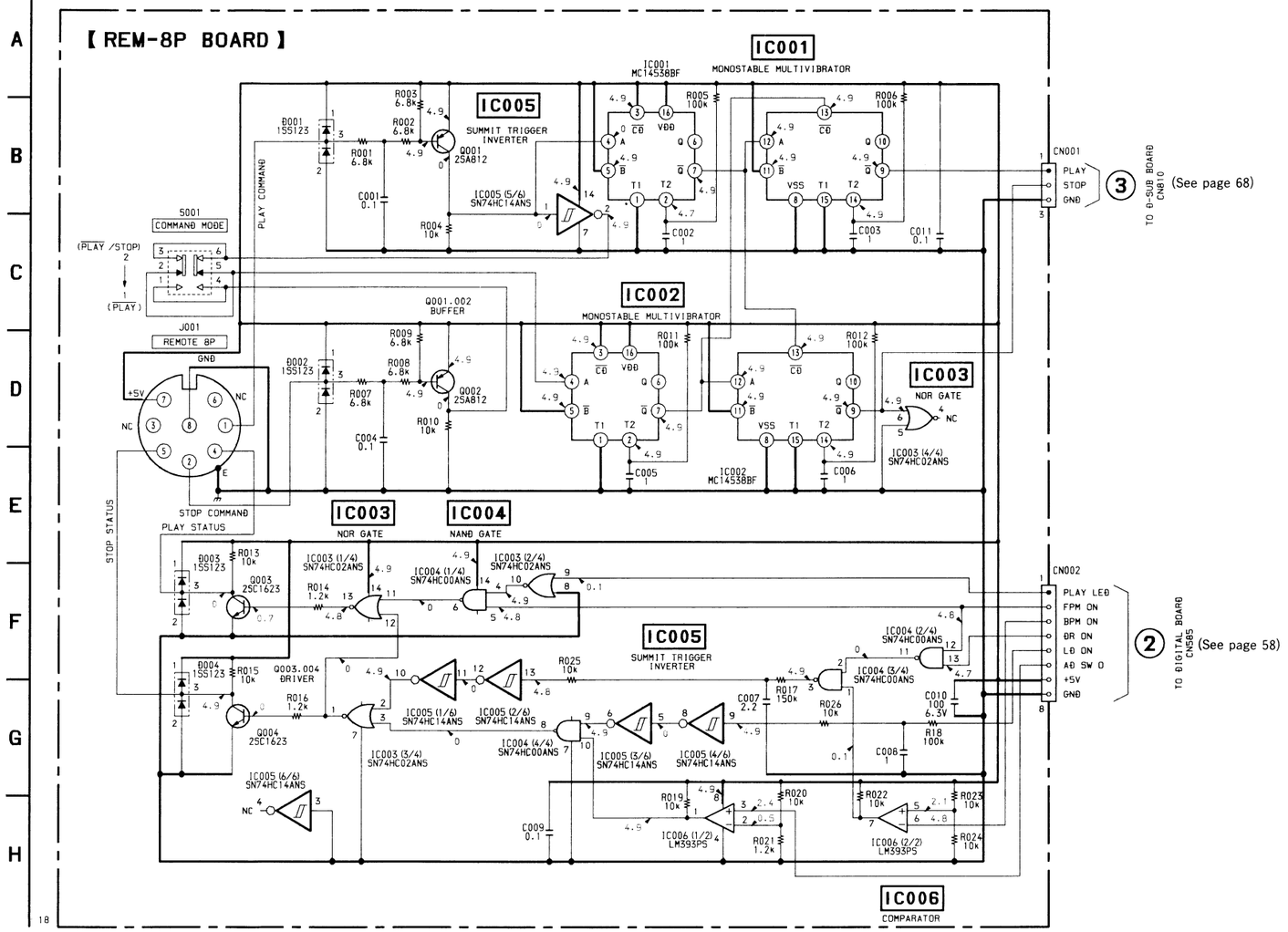




Note:

- All capacitors are 50WV or less are and tantalums.
- All resistors are specified.
- % : indicates
- ▬▬ : B+ Line
- ▬ ▬ : B– Line
- Voltage is dc wi under no-signal (d
- Voltages are taken Voltage variations tion tolerances.





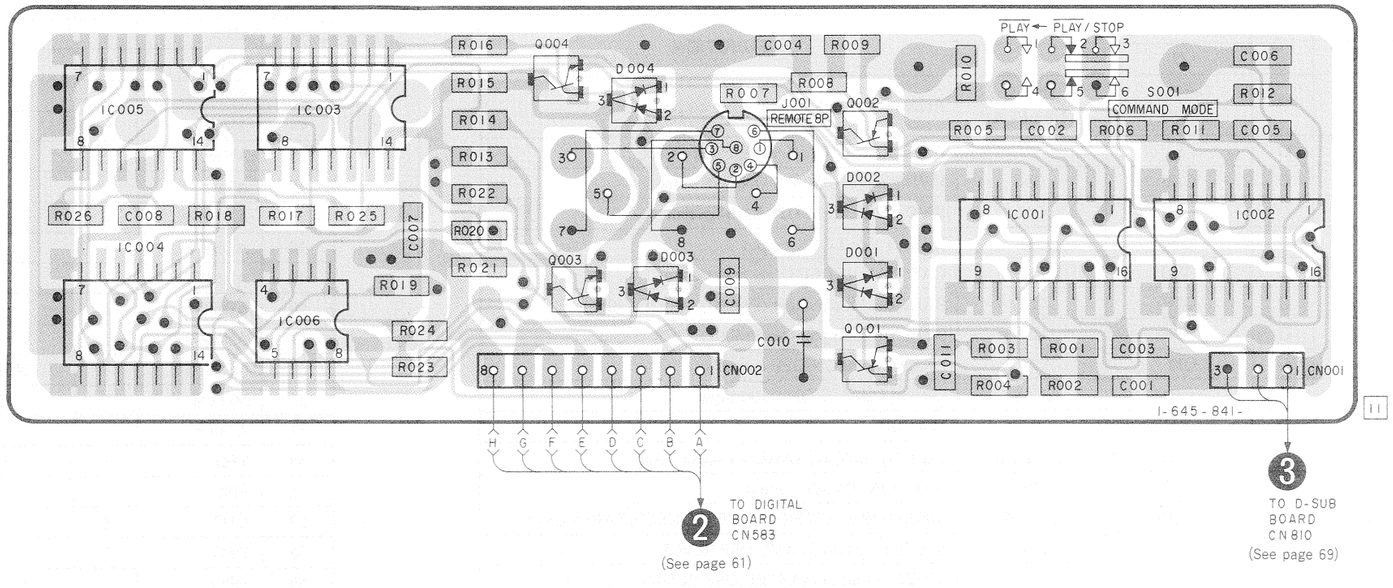
Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- % : indicates tolerance.
- ▬▬ : B+ Line
- ▬ ▬ : B– Line
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.

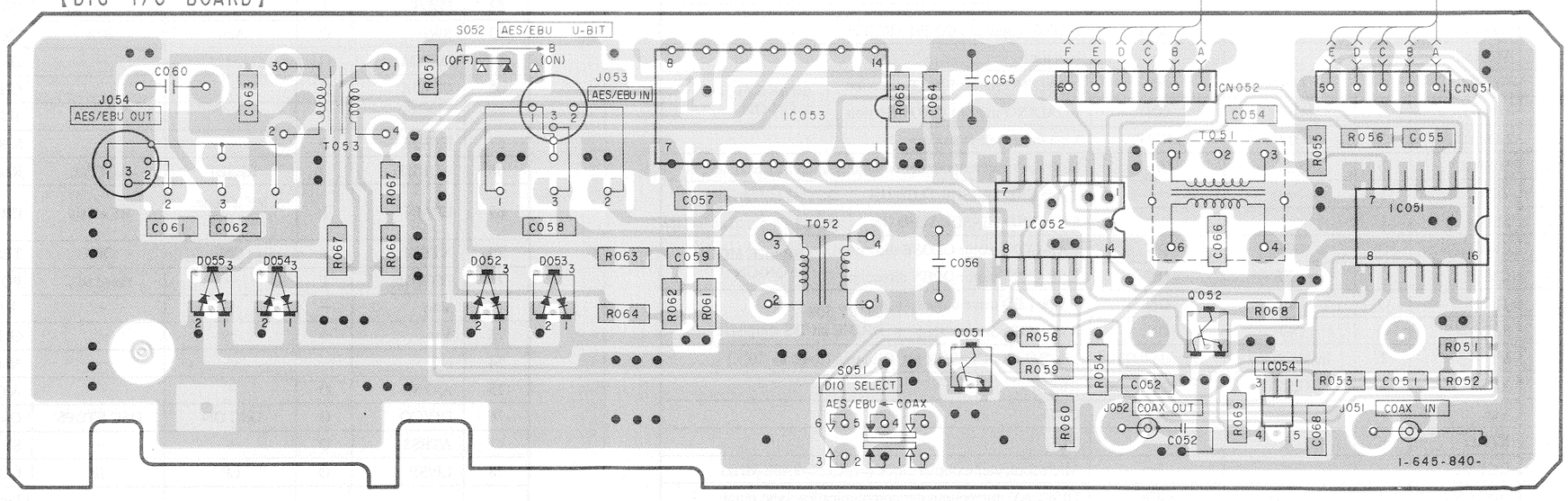
• Semiconductor Location

Ref. No.	Location
D001	C-7
D002	B-7
D003	C-6
D004	B-6
D052	G-4
D053	G-4
D054	G-2
D055	G-2
IC001	C-8
IC002	C-9
IC003	B-4
IC004	C-3
IC005	B-3
IC006	C-4
IC051	F-9
IC052	F-7
IC053	F-5
IC054	H-9
Q001	C-7
Q002	B-7
Q003	C-5
Q004	B-4
Q051	G-7
Q052	G-8

【REM-8P BOARD】



【DIG-I/O BOARD】



Note:
- ○— : parts extracted from the component side.
- —○— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ● : Through hole.
- ▨ : Pattern on the side which is seen.
- ▨ : Pattern of the rear side.

18

SECTION 6
PIN FUNCTION

IC501 MASTER microcomputer (CXP80524)

While exchanging data with the display microcomputer (IC701) by the serial communication, this IC controls the mechanism deck servo and selects inputs DSP (IC502, 503) and the attenuator (IC504).

PIN	SIGNAL NAME	I/O	LOGIC		FUNCTION
			O	I	
1	ATTEX	O	Outside (ATTCK)	Inside (1/8 LECK)	Attenuator (IC504) clock select output
2	ATTCK	O	–	–	Attenuator (IC504) level set clock output
3	FPON	O	OFF	ON	FWD plunger (PM002) ON/OFF output
4	FPKI	O	OFF	ON	FWD plunger (PM002) KICK output
5	TLOCK	O	ON	OFF	REEL T side LOCK output
6	CPDIR	O	FWD	RVS	CAPSTAN DIRECTION select output
7	BPON	O	OFF	ON	REEL BRAKE plunger (PM001) ON/OFF output
8	BPKI	O	OFF	ON	REEL BRAKE plunger (PM001) KICK output
9	DRON	O	OFF	ON	DRUM motor ON/OFF output
10	DRDIR	O	NORM	RVS	DRUM DIRECTION select input
11	OPT/COA	O	–	–	Not used
12	DIG/ANA	O	DIGITAL	ANALOG	INPUT/DIGITAL/ANALOG select output
13	REC/PB	O	REC	PB	Mode REC/PB select input
14	MST/SLV	O	SLAVE	MASTER	MONITOR MASTER/SLAVE (SOURCE/TAPE) select
15	SLVMUT	O	OFF	MUTE	MUTE output to SLAVE DSP (IC503)
16	MSTMUT	O	OFF	MUTE	MUTE output to MASTER DSP (IC502)
17	FS1	O	–	–	fs select: FS1 = STOP 0, 44.1K 0, 32K 1, 48K 1
18	FS0	O	–	–	fs select: FS0 = STOP 0, 44.1K 1, 32K 0, 48K 1
19	DFMUT	O	OFF	MUTE	MUTE output to DIG-FIL (IC312)
20	MDRST	O	–	–	Not used
21	LMEJ	O	OFF	ON	LOADING motor EJECT direction (BRAKE MODE at ON-ON)
22	LMLD	O	OFF	ON	LOADING motor LOAD direction (BRAKE MODE at ON-ON)
23	LINMUT	O	OFF	MUTE	Line mute (relay) output
24	DISPSL	O	ON	OFF	DISPLAY microcomputer communication SELECT output
25	TEND	I	–	–	T side END SENSOR TLED ON (DC (=) : Magnetic part)
26	SEND	I	–	–	S side END SENSOR SLED ON (AC (⊓⊓) : Leader tape)
27	CMCL	O	OFF	ON	CAS-CON. motor CLOSE direction (BRAKE MODE at ON-ON)
28	CMOP	O	OFF	ON	CAS-CON. motor OPEN direction (BRAKE MODE at ON-ON)
29	TLED	O	OFF	ON	T side LED drive output (DUTY 50% DRIVE on T/S antiphase)
30	SLED	O	OFF	ON	S side LED drive output (DUTY 50% DRIVE on T/S antiphase)
31	MP	I	Inside ROM	Outside ROM	MICRO PROCESSOR MODE input (fixed to "0")
32	XRST	I	RESET	⌐ RELEASE	RESET
33	Vss	–	–	–	GND
34	XTAL	–	–	–	NC
35	EXTAL	–	–	–	Microcomputer external clock (=MCLK=9.408 MHz)
36	DISPLSY	I	ON	OFF	DISPLAY microcomputer communication sync input
37	DISPDI	I	–	–	DISPLAY microcomputer communication serial data input
38	DISPDO	O	–	–	DISPLAY microcomputer communication serial data output

PIN	SIGNAL NAME	I/O	LOGIC		FUNCTION
			O	I	
39	DISPCK	I	–	–	DISPLAY microcomputer communication serial clock input
40	SBSY	I	ON (communicatable)	OFF (communicatable)	Signal Processing communication SUB DATA SYNC. input
41	SBDI	I	–	–	Signal Processing communication SUB DATA IN. input
42	SBDO	O	–	–	Signal Processing communication SUB DATA OUT. input
43	SDCK	O	–	–	Signal Processing communication SUB DATA CLOCK. input
44	AVss	–	–	–	Analogue input GND
45	AVref	–	–	–	Analogue input REFERENCE (+5V)
46	AVdd	–	–	–	Analogue input +5V
47	ADSW4	I	–	–	SWITCH A/D input (AES/COA select)
48	ADSW3	I	–	–	SWITCH A/D input (CAS-CON system)
49	ADSW2	I	–	–	SWITCH A/D input (LOADING system)
50	ADSW1	I	–	–	SWITCH A/D input (RECGN system)
51	ADSW0	I	–	–	SWITCH A/D input (RECGN system)
52	LEVSYN	I	NONE	MUSIC	LEVEL SYNC input (Write START-ID by the audio input)
53	MUTM	I	OFF	MUTE	MUTE monitor input from MASTER DSP (IC502)
54	ATFIN	I	–	–	ATF PILOT signal input
55	TFG	I	–	–	T-REEL FG input
56	SFG	I	–	–	S-REEL FG input
57	CFG	I	–	–	CAPSTAN FG input
58	DFG	I	–	–	DRUM FG input
59	DPG	I	–	–	DRUM PG input
60	DREF	I	–	–	DRUM REFERENCE SP 100/3, LP 50/3, SEARCH 1.6k (Hz ± α) input
61	MCLK	I	–	–	MASTER CLOCK (F_{CH}=9.408 MHz) input
62	PBDT	I	–	–	PB (playback) DATA input
63	SWP	O	Ach	Bch	SWITCHING PULSE
64	DPWM	O	–	–	DRUM PWM output
65	CPWM	O	–	–	CAPSTAN PWM output
66	TPWM	O	–	–	T-REEL PWM output
67	SPWM	O	–	–	S-REEL PWM output
68	ADRES	O	RESET	ACTIVE	Reset output for AD converter
69	ERMN	I	RF is none and REC	RF exists	ERROR MONITOR (PBRF exists or not) input
70	XTEST	I	ON	OFF	TEST MODE input
71	POWDN	I	–	Fixed to 1	POWER DOWN detect input (not used)
72	V_{DD}	–	–	–	+5V
73	Vss	–	–	–	GND
74	NC	–	–	–	Not connected
75	ATFS2	O	–	–	ATF Sync signal output to MASTER DSP (IC502)
76	DIVCO	O	OSC ON	OSC STOPS	Osc. ON/OFF select output to DIG-IN VCO (IC529)
77	ATFS3	O	–	–	SYNC3/RF AMP MODE for ATF (IC505)
78	LP/SP	O	LP	SP	LONG PLAY/STANDARD PLAY select output
79	XDTR	O	ON	OFF	DATA RECORDER MODE (ON during LP after-recording or searching)
80	ATTMUT	O	OFF	MUTE	Attenuator (IC504) MUTE, (ON during fading)

IC701 DISPLAY MICROCOMPUTER (MSC62408)

While serial communicating, this IC controls the fluorescent display tube, the level meter (IC709), the clock (IC712), the remote control signal, LED indication by the expansion port (IC707), key input scan.

PIN	SIGNAL NAME	I/O	LOGIC		FUNCTION
			O	I	
1−2	D6−D7	I/O	−	−	Data bus
3	PMODE0	I			PORT MODE0 } Mode setting input (normally open) for each processing
4	PMODE1	I			PORT MODE1
5	PMODE2	I			PORT MODE2
6	MMUTE	I	OFF	MUTE	Level meter muting input
7	ROMSI	I	−	−	Serial data input from E²PROM (IC702)
8	ROMBY	I	ON	OFF	BUSY signal input from E²PROM (IC702)
9	CMPIN	I	Vref < Vkey	Vref > Vkey	Comparator out input for KEY A/D
10	MSTAK	O	ON	OFF	Acknowledge output to the master microcomputer (IC501)
11	CPUSC	O	−	−	On the microcomputer communication, serial clock output
12	CPUSO	O	−	−	On the microcomputer communication, serial data output
13	CPUSI	I	−	−	On the microcomputer communication, serial data input
14	MOTUP	O	−	−	Not used
15	MOTDN	O	−	−	Not used
16	CLKCE	O	ON	OFF	Chip enable output to the real time clock (IC712)
17	RMC	I	−	−	Received remote control signal input
18	MSTSY	I	ON	OFF	Sync input from the master microcomputer (IC501)
19	TIMIN	I	ON	OFF	The real time clock (IC712) timing signal input
20	XRST	I	RESET	⌐ RELEASE	Microcomputer reset signal input
21	TEST	I	−	−	Test mode (Normally GND level)
22	EXPST	O	LATCH	ACTIVE	Strobe signal output to the output expansion IC (IC707)
23	METCE	O	⌐ ON	OFF	Chip enable signal output to the meter IC (IC709)
24	WR	O	ON	OFF	WRITE signal output and the meter IC (IC709)
25	RD	O	ON	OFF	READ signal output and the meter IC (IC709)
26	RAMCE	O	ON	OFF	Not used ("H" fixed)
27	ROMSO	O	−	−	Serial data output to E²PROM (IC702)
28	ROMSC	O	−	−	Serial clock signal output to E²PROM (IC702)
29	ROMCE	O	ON	OFF	Chip clock signal output to E²PROM (IC702)
30	OSCI	O	−	−	Ceramic oscillator for clock connecting terminal (4.19 MHz)
31	OSCO	O	−	−	Ceramic oscillator for clock connecting terminal (4.19 MHz)
32	GND	O	−	−	GND
33−40	T0−T7	O	OFF	ON	FL grid output
41−48	S31-S24	O	OFF	ON	FL segment output
49	VFLT	−	−	−	B+ for FL (+35V)
50−73	S23−S0	O	OFF	ON	FL segment output
74	V_{DD}	−	−	−	+5V power supply
75−80	D0−D5	I/O	−	−	Data bus

IC504 DIGITAL ATTENUATOR (CXD1136Q)

The IC504 is used as a digital attenuator for fade-in and fade-out.

PIN	SIGNAL NAME	I/O	FUNCTION
1	DIGO	O	Fader output data during PB
2	DIGI	I	Fader input data during REC
3	ERFO	O	Signal to identify whether DADT compensated the data
4	UNDF	O	Detection of ADDT L, R channel data below −54dB ("L" : Below −54dB)
5	OVFL	O	Detection of ADDT L channel data overflow ("L" : Overfolw)
6	OVFR	O	Detection of ADDT R channel data overflow ("L" : Overfolw)
7	VSS		GND
8	SUBT	I	Selection of subcode or 18bit data to be output to ADDT and DIGO ("H" or open : 18bit data output, "L" : Subcode output)
9	LSB1	I	Switching between MSB first and LSB first to DADT, ADDT, DIGI and DIGO ("H" or open : MSB first, "L" : LSB first)
10	LSB2	I	Switching between MSB first and LSB first to DAC2 and ADC2L (ADC2R) ("H" or open : MSB first, "L" : LSB first)
11	OVON	I	ON/OFF of overflow detection ("H" or open : OVFL, OVFR output valid, "L" : OVFL, OVFR fixed to "H")
12	LCF	I	ON/OFF of low-cut filter ("H" or open : ON)
13	ADDA	O	"H" in AD mode (DASL=DIAN= "L")
14	DIAN	I	AD, DA mode setting (fixed to "H")
15	DASL	I	AD, DA mode setting (REC/PB switching input)
16	MUTE	I	ON/OFF of fader ("H" : Fade ON)
17	ATLV	I	Digital volume range setting (fixed to "H") ("H" or open : 0∼−60, −∞dB, "L" : +12∼48, ∞dB)
18	ATON	I	ON/OFF of digital volume ("H" or open : OFF)
19	ATDN	I	Level down for digital volume
20	ATUP	I	Level up for digital volume
21	ATCK	I	Digital volume level setting clock and fader external clock
22	ATEX	I	Selection of fader operation clock ("H" or open : Internal clock, "L" : ATCK)
23	VDD	−	Power supply pin (+5V)
24	NC	−	
25	VDD'	−	Power supply for oscillation circuit (+5V)
26	SCK	O	System clock output
27	NC	−	
28	XTLI	I	External clock input pin. Input of 256fs.
29	NC	−	
30	XTLO	O	Crystal connection pin
31	VSS'	−	GND of oscillation circuit
32	CKSL	I	Selection of quartz clock frequency division ratio ("H" or open : Not divided, "L" : Divided to 1/2)
33	NC	−	
34	NC	−	
35	DOFF	I	ON/OFF of DAC2 digital offset ("H" or open : ON)
36	APSL	I	Selection of aperture correction filter coefficient (invalid in AD mode) ("H" or open : Corrected)
37	LRSL	I	Selection of L, R channel phase difference correction ("H" or open : Corrected)
38	DAC2	O	Serial data output to ×2 over sampling DA converter (complement of 2)
39	VSS	−	Power supply pin (+5V)

PIN	SIGNAL NAME	I/O	FUNCTION
40	BKSL	I	Switching input timing of LRCK and BCK ("H" or open : LRCK transition point synchronized with BCK rising edge, "L" : LRCK transition point sync. with BCK falling edge)
41	INSL	I	Selection of DADT, DIGI and ADC2L (ADC2R) data fetchig clock ("H" or open : BCK, "L" : INCK)
42	ADSL	I	Selection of ADC2L or ADC2R data ("H" or open : ADC2L, "L" : ADC2L or ADC2R switched by LRCK2)
43	NC	–	
44	WCK2	O	Clock equivalent to 4fs
45	LR21	O	DAC2 L, R channel identification signal in I²S format
46	APTL	O	Aperture signal
47	APTR	O	Aperture signal
48	LRCK2	O	DAC2, ADC2L (ADC2R) L, R channel identification signal (equivalent to 2fs) ("L" : L channel, "H" : R channel)
49	XLRCK2	O	Inverted output of LRCK2
50	XBCK	O	Inverted output of BCK
51	BCK	I	DADT, ADDT, DIGI and DIGO data fetching clock equivalent to 64fs
52	INCK	I	DATA, DIGI and ADC2L (ADC2R) data fetching clock
53	VDD	–	Power supply pin (+5V)
54	ADC2L	I	Serial data input from ×2 over sampling AD converter (complement of 2)
55	ADC2R	I	Serial data input from ×2 over sampling AD converter (complement of 2)
56	LRCK	I	DADT, ADDT, DIGI and DIGO L, R channel identification signal (fs) ("L" : L channel, "H" : R channel)
57	ADDT	O	Fader output data during REC
58	ERFI	I	Signal to identify whether DADT compensates the data
59	DADT	I	Fader input data during PB
60	OVCW	I	Clock to determine OVFL, OVFR and UNDF detection time

IC502, 503 DAT SIGNAL PROCESSING (CXD2601Q)

This one-chip LSI executes the recording and playback signal processing of the R-DAT system and it contains circuits for digital PPL, modulation and demodulation, error correction, digital I/O and RAM control. Two identical ICs are used for leading head and trailing head.

PIN	SIGNAL NAME	I/O	FUNCTION
1, 2	A08, A09	I/O	RAM address A08, A09
3	VDD	–	Power supply pin (+5V)
4–6	A10–A12	I/O	RAM address A10–A12
7, 8	A13, A14	O	RAM address A13, A14
9	XWE	O	RAM write enable signal
10	XOE	O	RAM output enable signal
11	XEAN	O	Bus interrupt enable signal for external addressing
12	TST1	I	Test pin (normally "L")
13	XT1O	O	18.816MHz crystal oscillation output
14	XT1I	I	18.816MHz crystal oscillation input
15	VSS	–	Power supply pin (GND)
16	XRST	I	Reset pin (normally "H")
17	CLKO	I/O	18.816MHz clock output

PIN	SIGNAL NAME	I/O	FUNCTION
18	XCST	I/O	CLKO division timing signal to generate SYCK (internal system clock)
19	ATSY	I	ATF sync. signal input
20	MCLK	O	9.408MHz clock output
21	DREF	O	Drum servo reference signal (Normal : 50/3-200/3MHz, Search : 16kHz)
22	SBPM	O	Signal to identify whether subcode I/O clock (EXCK) is accepted ("L" : Accepted, "H" : Not accepted)
23	EXCK	I	Subcode I/O data transfer clock (DUTY50)
24	SDSI	I	Subcode serial data input
25	SDSO	O	Subcode serial data output
26	SBSY	O	Subcode I/O sync. signal (30ms cycle, or 60ms in LP mode)
27	COPY	O	Copy information output
28	EMP	O	Emphasis information output (Provided : "H")
29	MUTE	I	Mute pin
30	MUTM	O	Mute identification signal ("H" : Muted)
31	UNLK	O	RX PLL lock identification signal ("H" : Locked)
32	ERMN	O	RF detection ("H" : RF detected, REC mode : "L")
33	SYMN	O	C1 check associated with RF ("H" : OK)
34	CHER	I	Signal to identify whether C2 is only once or twice (C2→C1→C2 or C1→C2) ("H" : Once, "L" : Twice)
35	PLCK	I/O	RF PLL clock output
36	TST2	I	Test pin (Normally "L")
37	RFDT	I	RF signal input
38	XCS	I	Subcode I/O chip selection ("L" : Select)
39	SWP	I	RF switching pulse ("L" : A-CH, "H" : B-CH)
40	VSS	—	Power supply pin (GND)
41	PIPC	O	Signal to identify REC data PILOT/PCM ("H" : PILOT, fixed to "L" in PB mode)
42	REPB	O	REC/PB switching signal ("H" : REC)
43	REDT	O	REC signal output (Fixed to "L" in PB mode)
44	TST4	I	Test pin (Normally "L")
45	TST3	O	PD output of RX APLL (comparator output)
46	TST5	I	RX APLL oscillation cell amplifier input
47	TST6	O	RX APLL oscillation cell amplifier inverted output
48	PLCO	I	RX APLL external VCO clock input
49	PLVR	O	Comparison signal (Vin) by RX APLL external comparator. Not used in this set.
50	PLRF	O	Comparison signal (Rin) by RX APLL external comparator. Not used in this set.
51	MSSL	I	Master/slave setting ("H" : Master, "L" : Slave) (IC502 : Fixed to H, IC503 : Fixed to L)
52	RX	I	Digital input
53	VDD	—	Power supply pin (+5V)
54	TX	O	Digital output
55	AUDR	I	Audio mode/data recorder mode settiong ("H" : Audio mode, "L" : Data recorder mode)
56	EXSY	I/O	Complete copy sync. siginal (25/3-100/3Hz)
57	EXSN	I/O	Complete copy sync. siginal (25/3-100/3Hz)
58	F128	I/O	128fs clock
59	F256	O	256fs clock
60	F512	O	512fs clock
61	ADLF	I	Signal to idntify whether ADDT serial data MSB first or LSB first ("H" : LSB first)

PIN	SIGNAL NAME	I/O	FUNCTION
62	DALF	I	Signal to identify whether DADT serial data is MSB first or LSB first ("H" : LSB first)
63	XT2O	O	22.5792MHz crystal oscillation output
64	XT2I	I	22.5792MHz crystal oscillation input
65	VSS	–	GND
66	XT3O	O	49.152MHz crystal oscillation output (24.576MHz in B´mode)
67	XT31	I	49.152MHz crystal oscillation intput (24.576MHz in B´mode)
68	FSEN	I	F128, BCK, LRCK, input/output switching ("H" : Output) IC502 : Fixed to H, IC503 : Fixed to L
69	LR03	O	Inversion of LR02
70	LR02	O	LRCK delayed by 16BCK
71	LR01	O	LRCK delayed by 15BCK
72	LRCK	I/O	fs clock output
73	WCK	O	2fs clock output
74	XBCK	O	Invertsion of BCK
75	BCK	I/O	64fs clock
76	ADDT	I	Serial DA data (complement of 2)
77	DADT	O	Serial DA data (complement of 2)
78	DADO	I	DA data input for digital output (connected to DADT)
79	ADDI	O	(AD) data output for digital input
80	ADDN	I	(AD) data intput for digital input
81	ERRI	I	V-FLAG information input for digital output (connected to ERRF)
82	ERRF	O	Signal to identify whether DADT compensated the data ("H" : Compensated data)
83	MNTG	O	Error correction status monitor trigger
84–89	D7–D2	I/O	RAM data D7-D2
90	VSS	–	Power supply pin (GND)
91, 92	D1, D0	I/O	RAM data path D1, D0
93–100	A00–A07	I/O	RAM address A00-A07

IC304 A/D CONVERTER (CS5326-KP)

(1bit A/D converter for ×64 over sampling)

PIN	SIGNAL NAME	I/O	FUNCTION
1	AGND	–	Analog ground
2	AINL	I	Lch analog input
3	ZEROL	I	Lch zero level input
4	VA+	–	Analog positive power supply, +5V
5	VA–	–	Analog negative power supply, –5V
6	APD	I	Analog power down (Fixed to "L")
7	ACAL	I	Analog calibration, connected to DCAL pin "H" : Zero level input (ZEROL, ZEROR), "L" : Analog input (AINL, AINR)
8	NC	–	Not connected
9	DCAL	O	Digital calibration, indicating that offset calibration is under execution. Connected to ACAL pin.
10	DPD	I	Digital power down. "H" : Power down mode
11	TST1	I	Test pin (GND)
12	TST2	I	Test pin (GND)
13	TST3	I	Test pin (GND)
14	L/$\overline{R}$(LR03)	I	Input channel selection (LR03) fs clock input. "H" : Lch data, "L" : Rch data
15	SCLK(BCK)	I	Serial data output clock (64fs)
16	SDATA(ADDT)	O	Serial data output from MSB first in 2's complement mode
17	VD1+	–	Digital power supply, +5V
18	VD2+	–	Digital power supply, +5V
19	DGND	–	Digital ground
20	DCLKA	I	Digital input clock, connected to ACLKA pin
21	NC	–	Not connected
22	ACLKA	O	Analog output clock, connected to DCLK pin
23	CLKIN	I	Master clock (128fs)
24	LGND	–	Analog logic ground
25	VL+	–	Analog logic power supply, +5V
26	ZEROR	I	Rch zero level input
27	AINR	I	Rch analog input
28	VREF	O	Reference voltage output, –3.68V. Input signal full scale setting

IC348 D/A CONVERTER (CXD2552Q)

(Pulse D/A converter for ×64 over sampling)

PIN	SIGNAL NAME	I/O	FUNCTION
1	VDD2	–	Analog power supply
2	VSS	–	Analog ground
3	R(−)	O	Rch PLM output (reverse phase)
4	VDD	–	Analog power supply
5	VDSS2	–	Analog ground
6	VSUB	–	Substrate, connected to GND
7	LRCKO	O	LRCK output (64fs)
8	DM2	I	Dither Polarity
9	DM1	I	Dither designation
10	POL	I	Polarity of PLM output ("L" : Positive phase sequence, "H" : Reverse phase)
11	DVDD	–	Digital power supply
12	TEST3	I	Test pin (Normally "L")
13	MUTE	I	Mutes interpolator output to zero data ("H" : valid)
14	LRCKI	I	LRCK input (8fs)
15	DRI	I	Rch data input (×8 rate)
16	DLI	I	Lch data input (×8 rate)
17	BCKI	I	BCK input
18	TEST1	I	Test pin (Normally "L")
19	TEST2	I	Test pin (Normally "L")
20	SYNC	I	Sync. control
21	INIT	I	Re-synchronization at rising edge of INIT signal
22	128fs	O	128fs output
23	VSUB	–	Substrate, connected to GND
24	512fs	O	512fs output
25	DINIT	O	Delayed INIT signal output
26	INAF	O	"H" output when I/O sync. is disorderd
27	DVSS	–	Digital GND
28	VSUB	–	Substrate, connected to GND
29	VSS2	–	Analog GND
30	VDD	–	Analog power supply
31	L(−)	O	Lch PLM output (reverse phase)
32	VSS	–	Analog GND
33	VDD2	–	Analog power supply
34	VSS	–	Analog GND
35	L(+)	O	Lch PLM output (positive phase sequence)
36	VDD	–	Analog power supply
37	VSUB	–	Substrate, connected to GND
38	XVSS	–	Clock GND
39	XIN	I	Crystal oscillation input (1024fs)
40	XOUT	O	Crystal oscillation output
41	XVDD	–	Clock power supply
42	VDD	–	Analog power supply
43	R(+)	O	Rch PLM output (positive phase sequence)
44	VSS	–	Analog GND

IC350 DIGITAL FILTER (SM5813APT)

(Digital filter for ×8 over sampling)

PIN	SIGNAL NAME	I/O	FUNCTION
1	DIN	I	Input data (DADT)
2	BCKI	I	Input data bit clock (64fs)
3	$\overline{\text{CKSL}}$	I	System clock selection (Fixed to "L")
4	$\overline{\text{CKDV}}$	I	System clock selection (Fixed to "H")
6	XTI	I	Crystal oscillation input (256fs)
7	XTO	O	Crystal oscillation output
8	VSS1	–	GND pin 1
9	CKO	O	Crystal oscillation output clock
10	$\overline{\text{SYN}}$	I	Jitter free mode/forced sync. mode selection "H" : Jitter free, "L" : Forced sync. (Fixed to "H")
14	$\overline{\text{RST}}$	I	System reset ("H" : Normal operation, "L" : System reset)
15	$\overline{\text{COB}}$	I	Complement of 2/COB selection "H" : Complement of 2, "L" : COB (Fixed to "H")
16	$\overline{\text{OW20}}$	I	Output bits selection (Fixed to "H")
17	$\overline{\text{OW18}}$	I	Output bits selection (Fixed to "L")
20	DG	O	Deglitch control clock
21	VSS2	–	GND pin 2
22	VDD	–	Power supply pin (5V)
23	DOR	O	Rch ×8 over sampling output data
24	DOL	O	Lch ×8 over sampling output data
25	WCKO	O	Word clock (8fs) of output data
26	BCKO	O	Bit clock of output data
27	FSCO	O	fs cycle internal computing timing clock
28	LRCI	I	Input data sampling rate (fs) clock ("H" : Lch, "L" : Rch)

※ Other pins are NC pins

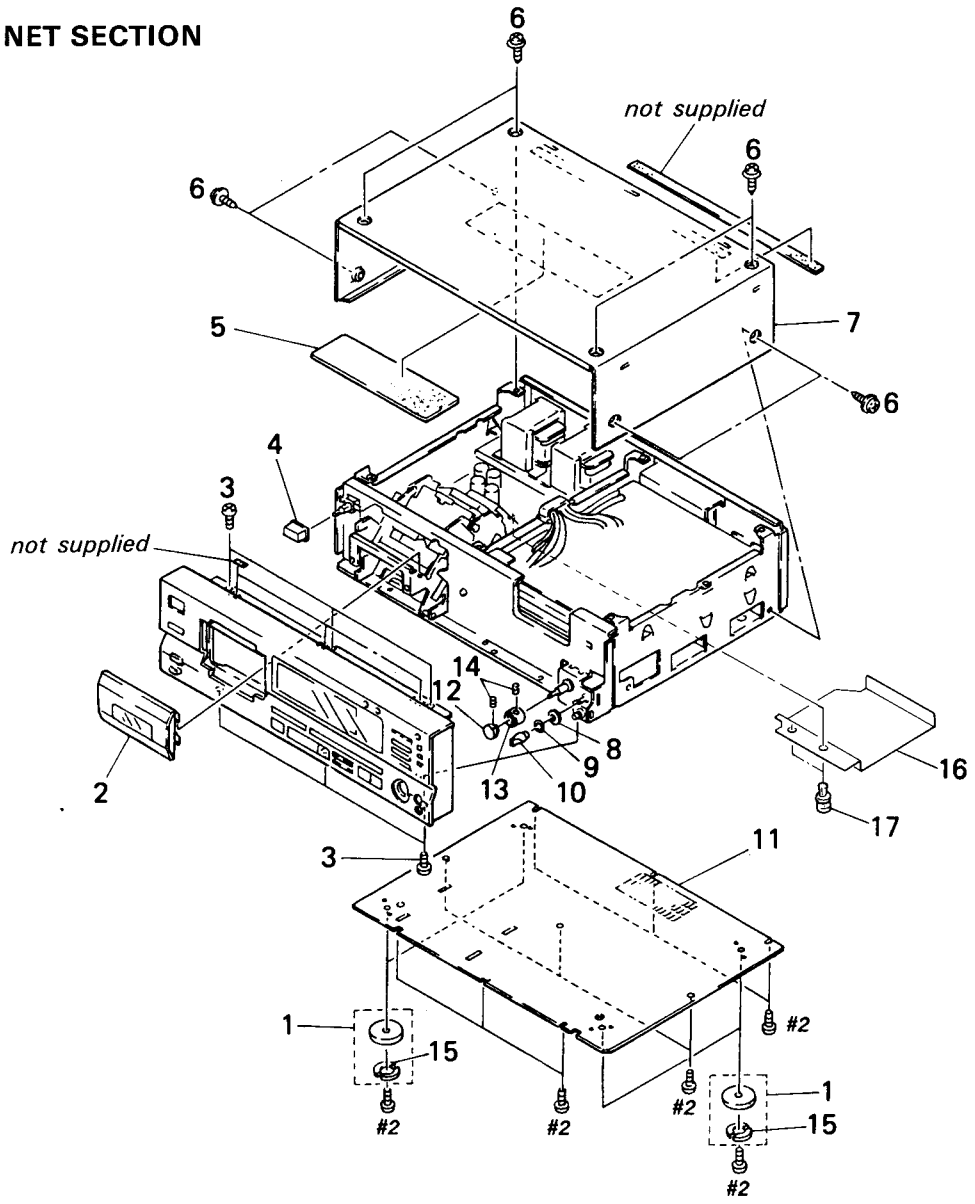
SECTION 7
EXPLODED VIEWS

NOTE:
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE(WHITE)...(RED)
  ↑ ↑
  Parts color Cabinet's color
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- hardware (#mark) list is given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

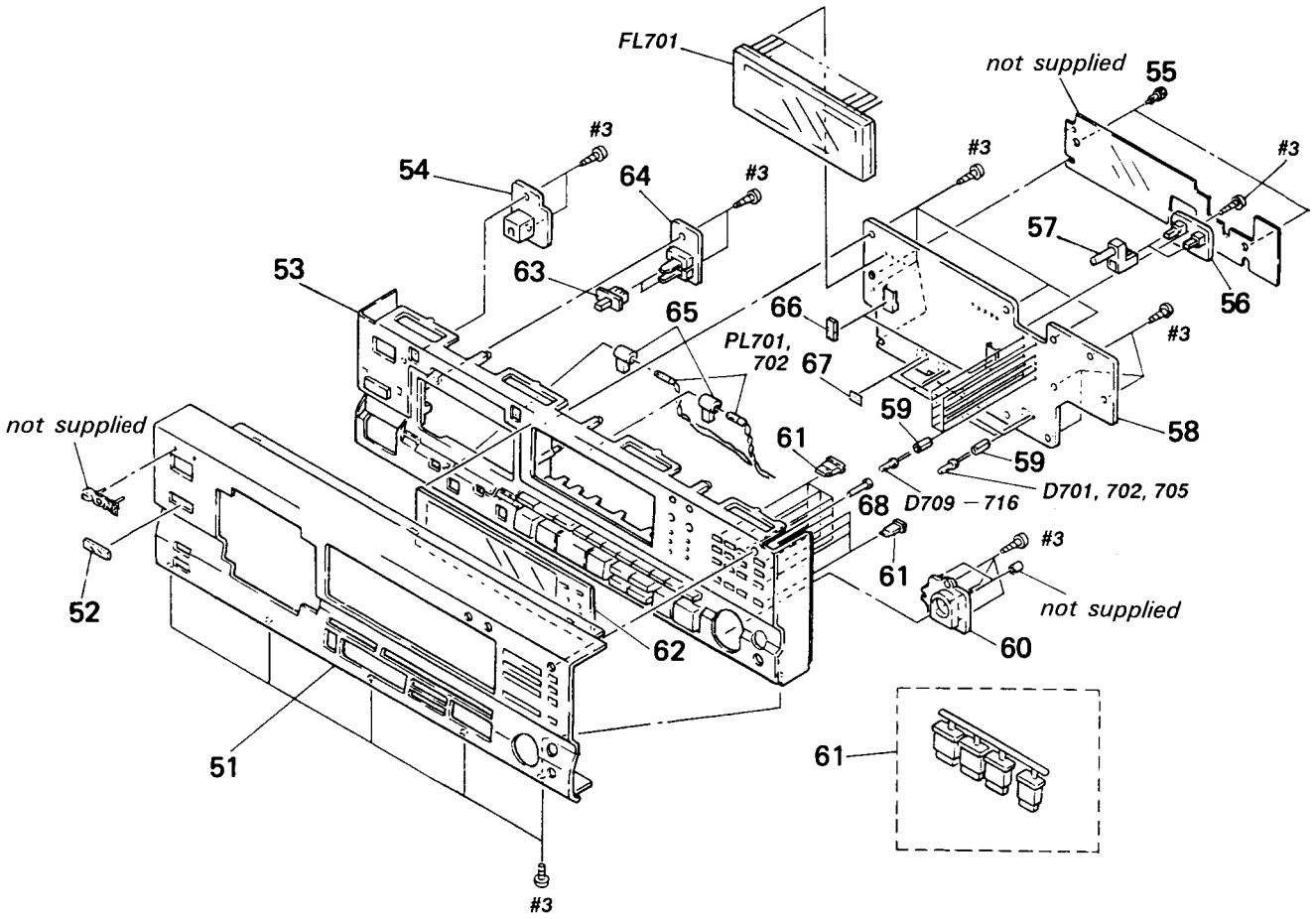
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

7-1. CABINET SECTION



Ref. No.	Part No.	Description	Remark
1	X-4911-201-1	FOOT ASSY	
2	A-2003-912-A	PANEL (CASSETTE) ASSY	
3	3-703-685-21	SCREW (+BV 3X8)	
4	4-923-520-31	KNOB, POWER	
* 5	4-936-612-01	RUBBER (DAMPER)	
6	3-704-366-01	SCREW (CASE) (M3X8)	
* 7	3-369-901-11	CASE	
* 8	4-604-335-01	PLATE, BLIND (A)	
9	3-356-935-01	SPRING	
10	3-354-931-01	KNOB (DIA. 10)	
* 11	4-931-433-11	PLATE, BOTTOM	
12	X-3362-380-1	KNOB (REC-R) ASSY	
13	X-3362-381-1	KNOB (REC-L) ASSY	
14	3-701-506-01	SET SCREW, DOUBLE POINT 3X4	
15	4-923-836-11	CUSHION	
* 16	3-378-576-01	COVER (POWER)	
17	4-812-134-11	RIVET NYLON, 3.5	

7-2. FRONT PANEL SECTION

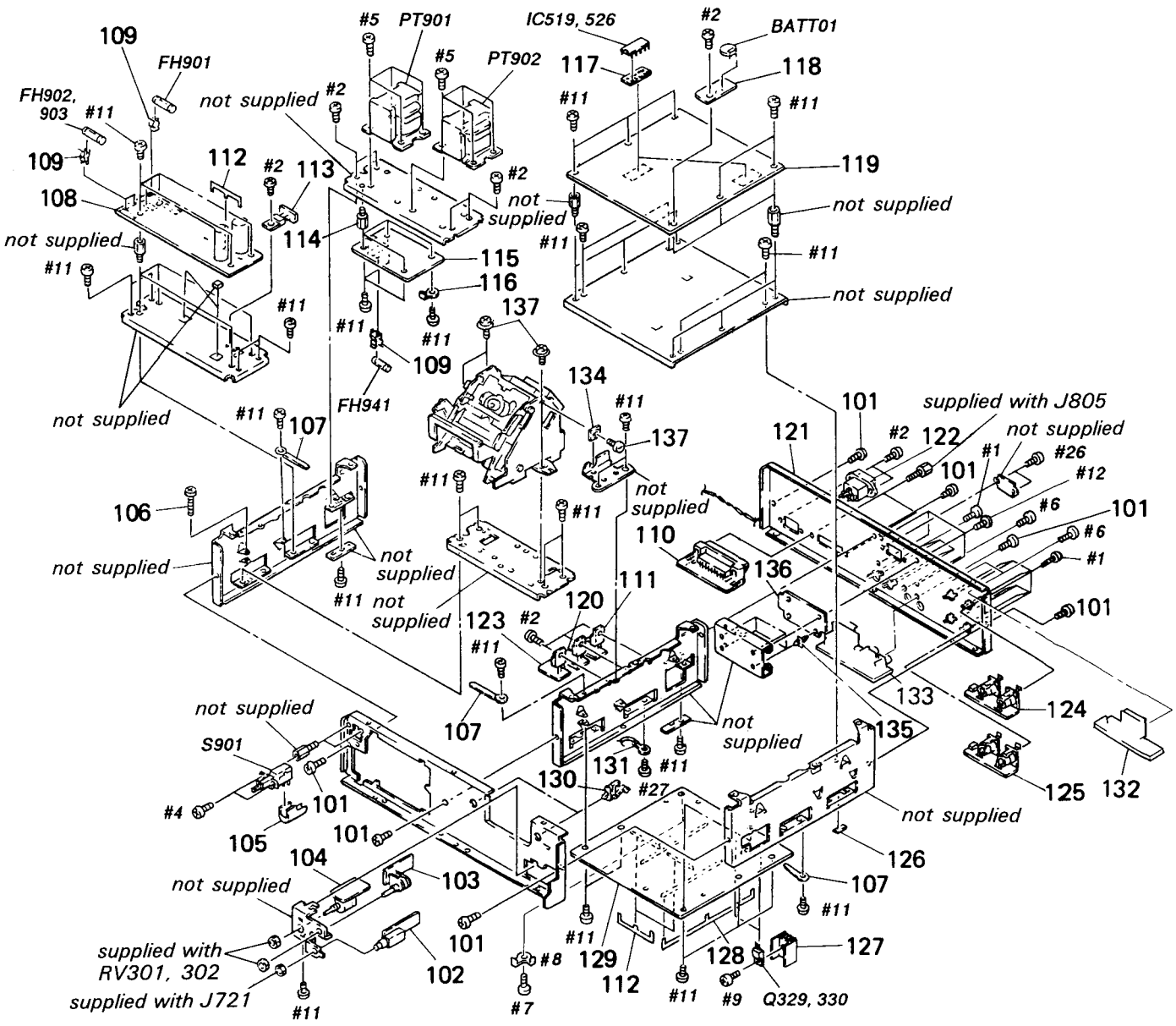


Ref. No.	Part No.	Description	Remark
51	3-364-943-51	PANEL (FRONT)	
52	3-364-919-01	FILTER	
53	X-3363-419-1	ESCUTCHEON (PANEL) ASSY	
* 54	1-637-609-11	SENSOR BOARD	
55	3-531-576-01	RIVET	
* 56	1-637-610-11	PUSH SW BOARD	
57	4-923-879-01	BUTTON (DIA. 4)	
* 58	A-2006-601-A	CONTROL SW BOARD, COMPLETE	
* 59	4-911-676-01	SPACER, LED	
60	3-364-928-21	ESCUTCHEON (R. V)	
61	3-364-927-01	BUTTON (10 KEY)	

Ref. No.	Part No.	Description	Remark
62	3-364-924-11	WINDOW (FL TUBE)	
63	3-307-538-21	KNOB, SWITCH, TIMER	
* 64	1-637-608-11	SLIDE SW BOARD	
* 65	3-365-031-01	COVER, LAMP	
66	9-911-839-XX	CUSHION	
67	3-831-441-11	CUSHION	
68	4-934-031-01	BUTTON (DISPLAY)	
FL701	1-519-601-11	INDICATOR TUBE, FLUORESCENT	
PL701	1-518-664-11	LAMP, PILOT	
PL702	1-518-664-11	LAMP, PILOT	

7-3. CHASSIS SECTION

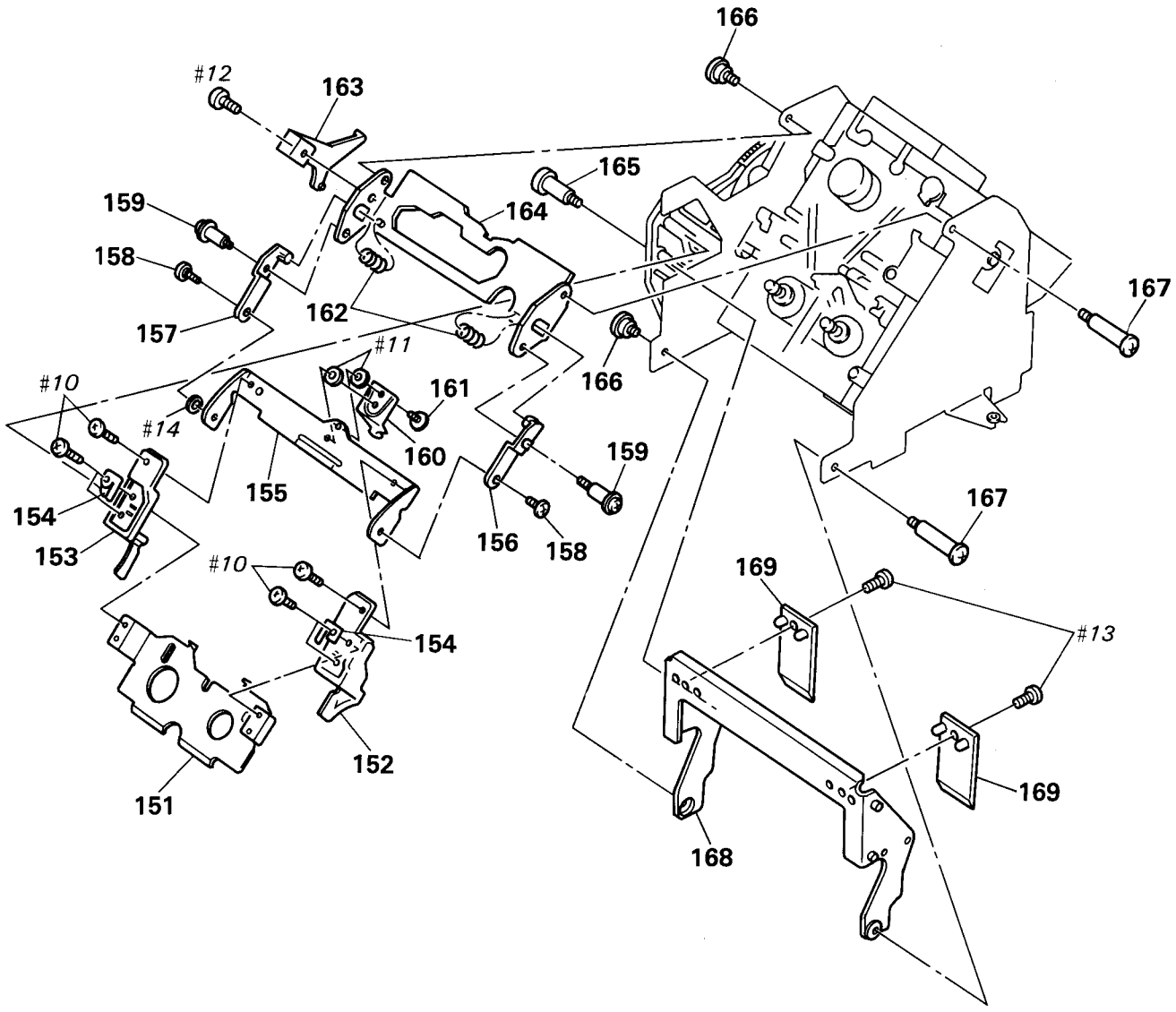
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifé.



Ref. No.	Part No.	Description	Remark
101	3-703-685-21	SCREW (+BV 3X8)	
* 102	1-637-614-11	HP JACK BOARD	
* 103	1-637-613-11	HP VOL BOARD	
* 104	1-637-615-11	REC VOL BOARD	
105	3-575-524-00	COVER, POWER SWITCH	
106	3-704-242-01	SCREW, TERMINAL, + BVTP CLAW	
107	3-703-150-11	STOPPER, WIRING	
* 108	A-2006-626-A	POWER BOARD, COMPLETE	
⚠* 109	1-533-213-31	HOLDER, FUSE	
* 110	1-640-288-11	D-SUB BOARD	
* 111	1-637-623-11	TR-B BOARD	
* 112	1-568-130-11	BAR, BUS 3P	
* 113	1-637-625-11	DIODE BOARD	
* 114	3-363-575-31	SUPPORT	
* 115	1-637-621-11	LINE FILTER BOARD	
116	4-870-539-00	PLATE, GROUND	
117	1-543-843-11	BEAD, FERRITE	
* 118	1-637-626-11	BATTERY BOARD	
* 119	A-2006-831-A	DIGITAL BOARD, COMPLETE	
* 120	1-637-622-11	TR-A BOARD	
* 121	3-381-194-01	PANEL, BACK (US, Canadian)	
* 121	3-381-194-11	PANEL, BACK (AEP, UK)	
⚠* 122	1-580-375-21	INLET 3P	
* 123	1-637-624-11	TR-C BOARD	
* 124	1-640-286-11	BAL IN BOARD	
* 125	1-640-287-12	BAL OUT BOARD	

Ref. No.	Part No.	Description	Remark
126	9-911-843-XX	CUSHION, FLYWHEEL	
* 127	4-931-401-01	HEAT SINK, V.OUT	
128	1-568-129-11	BAR, BUS 8P	
* 129	A-2006-607-A	AUDIO BOARD, COMPLETE	
* 130	3-329-937-02	CLIP, WIRE	
131	1-555-724-00	WIRE, GROUND	
* 132	A-2006-825-A	REM-8P BOARD, COMPLETE	
* 133	A-2006-826-A	DIG-I/O BOARD, COMPLETE	
134	4-931-466-01	SPACER	
* 135	3-703-353-01	SUPPORT, PC BOARD	
* 136	A-2006-603-A	BAL CONV BOARD, COMPLETE	
137	4-886-821-11	SCREW, S TIGHT, +PTTWH 3X6	
⚠BATT01	1-528-229-11	BATTERY, LITHIUM CR-2450	
⚠FH901	1-532-237-00	FUSE, TIME-LAG (BET) 3.15A/250V (AEP, UK)	
⚠FH901	1-532-745-11	FUSE, GLASS TUBE 3.15A/125V (US, Canadian)	
⚠FH902	1-532-203-00	FUSE, TIME-LAG 2A/250V (AEP, UK)	
⚠FH902	1-532-743-11	FUSE, GLASS TUBE 2A/125V (US, Canadian)	
⚠FH903	1-532-203-00	FUSE, TIME-LAG 2A/250V (AEP, UK)	
⚠FH903	1-532-743-11	FUSE, GLASS TUBE 2A/125V (US, Canadian)	
⚠FH941	1-532-203-00	FUSE, TIME-LAG 2A/250V (AEP, UK)	
⚠FH941	1-532-743-11	FUSE, GLASS TUBE 2A/125V (US, Canadian)	
⚠PT901	1-423-341-11	TRANSFORMER, POWER (D) (US, Canadian)	
⚠PT901	1-423-342-11	TRANSFORMER, POWER (D) (AEP, UK)	
⚠PT902	1-450-449-11	TRANSFORMER, POWER (A) (US, Canadian)	
⚠PT902	1-450-604-11	TRANSFORMER, POWER (A) (AEP, UK)	
⚠S901	1-554-920-11	SWITCH, PUSH (AC POWER) (1 KEY)	

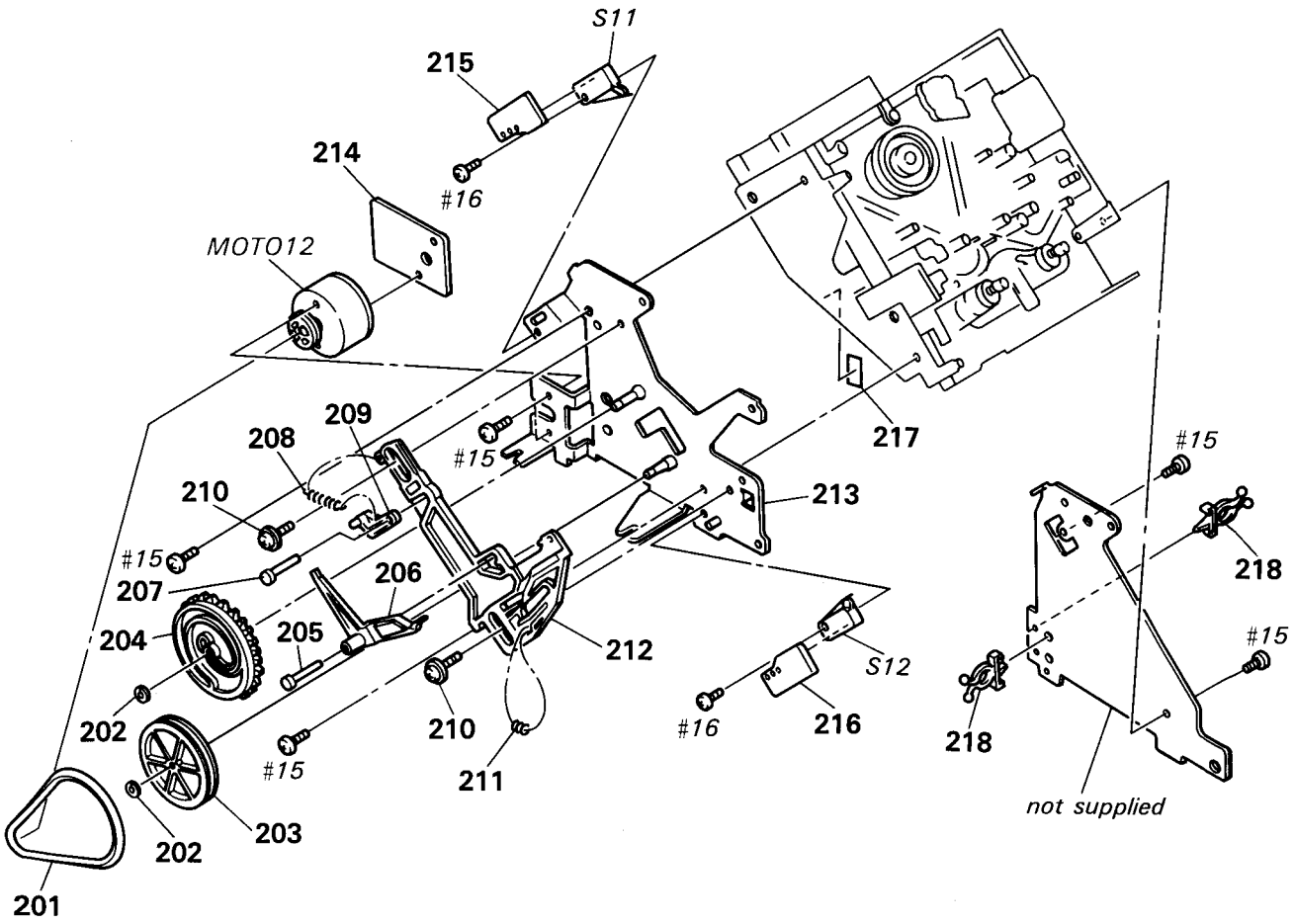
7-4. MECHANISM DECK SECTION-1



Ref. No.	Part No.	Description	Remark
151	4-931-476-01	HOLDER (LOWER)	
152	4-931-486-01	HOLDER (C-RIGHT)	
153	4-931-484-01	HOLDER (C-LEFT)	
154	3-366-308-01	SPRING (SIDE), PLATE	
* 155	4-931-485-01	HOLDER (C-INNER)	
156	4-931-481-01	ARM (LIMITER L)	
157	4-931-473-01	ARM (LIMITER R)	
158	3-312-161-00	SCREW, STEP, PRECISION	
159	4-918-991-01	SCREW, STEP	
160	4-931-461-01	SPRING (CENTER), LEAF	

Ref. No.	Part No.	Description	Remark
161	3-352-517-01	SCREW (M2X2.5)	
162	3-537-214-00	SPRING, COMPRESSION	
* 163	X-3362-941-1	JOINT ASSY	
* 164	3-369-235-11	PLATE, FULCRUM	
165	4-931-471-01	SCREW (STEP)	
166	2-236-956-00	SCREW, STEP	
167	4-931-463-01	SCREW (STEP)	
168	4-931-474-01	HOLDER (WINDOW)	
169	4-931-469-01	PLATE, ORNAMENTAL	

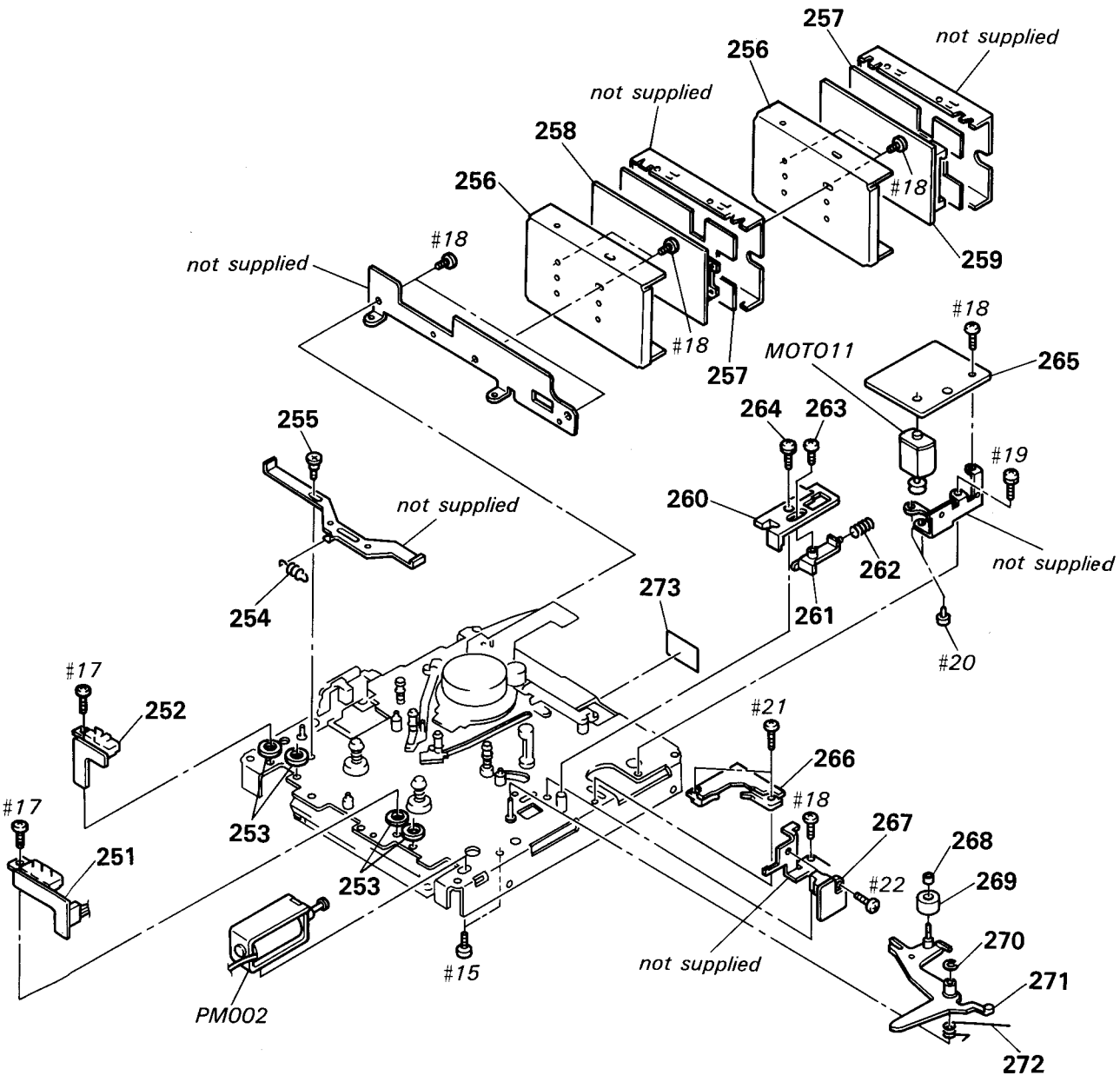
7-5. MECHANISM DECK SECTION-2



Ref. No.	Part No.	Description	Remark
201	4-931-470-01	BELT (DRIVING)	
202	3-307-948-21	WASHER, NYLON	
203	4-931-459-01	PULLEY	
204	4-931-477-01	GEAR (CAM)	
205	4-931-468-01	SHAFT (PRESS FITTING)	
206	4-931-490-01	LEVER (LINK)	
207	4-936-626-01	SHAFT (ARM PRESS FITTING)	
208	3-549-810-00	SPRING, TENSION	
209	4-931-460-01	ARM (SLIDER)	
210	4-932-336-01	SCREW (STEP)	

Ref. No.	Part No.	Description	Remark
211	3-537-215-00	SPRING, COMPRESSION	
212	4-931-492-01	SLIDER (CAM)	
* 213	X-4919-023-1	PLATE ASSY, SIDE	
* 214	1-633-726-11	CASSE-COM MOTOR BOARD	
* 215	1-633-727-11	CASSE-COM SW(IN) BOARD	
* 216	1-633-728-11	CASSE-COM SW(OUT) BOARD	
217	3-846-312-00	SPACER	
218	4-953-346-01	CLAMP, LEAD	
MOTO12	A-2003-448-A	MOTOR ASSY (CASSETTE COMPARTMENT)	

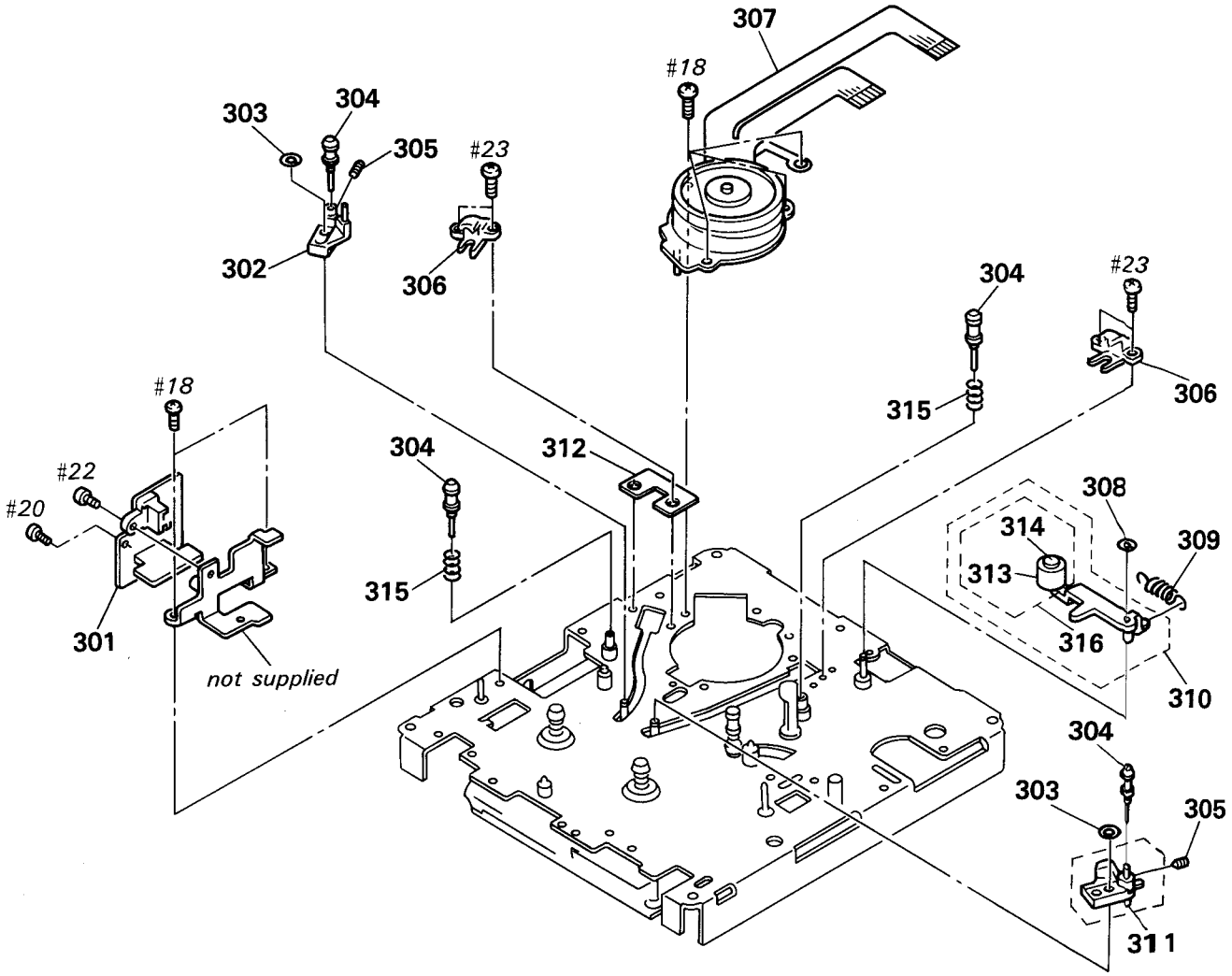
7-6. MECHANISM DECK SECTION-3 (DATM-51)



Ref. No.	Part No.	Description	Remark
* 251	1-637-605-11	T-SW BOARD	
* 252	1-637-604-11	S-SW BOARD	
253	3-344-781-01	WASHER, POLYETHYLENE	
254	3-307-375-00	SPRING, TENSION	
255	3-312-161-00	SCREW, STEP, PRECISION	
* 256	3-337-686-11	CASE (LOWER), SHIELD	
* 257	3-362-537-01	SHEET (RF)	
* 258	A-2006-207-A	RF AMP, COMPLETE (PB)	
* 259	A-2006-206-A	RF AMP, COMPLETE (REC/PB)	
260	3-362-148-01	SLIDER (PINCH)	
261	3-362-149-01	SLIDER (LIMITTER)	
262	3-564-035-00	SPRING, COMPRESSION	
263	2-623-756-01	SCREW, (B1.7X3), TAPPING	

Ref. No.	Part No.	Description	Remark
264	3-703-502-11	SCREW	
* 265	1-637-601-11	LOADING MOTOR BOARD	
* 266	1-637-606-11	LOAD-SW BOARD	
* 267	1-637-603-11	T-END BOARD	
268	3-337-626-01	CAP, PINCH ROLLER	
269	X-3337-610-1	PINCH ROLLER ASSY	
270	3-701-436-11	WASHER, STOPPER	
271	X-3362-021-1	LEVER (PINCH ROLLER) ASSY	
272	3-367-352-01	SPRING (PINCH)	
273	3-366-886-01	SHEET (RF BRACKET)	
MOTO11	A-2003-660-A	MOTOR ASSY (LOADING)	
PM002	1-454-522-11	SOLENOID, PLUNGER	

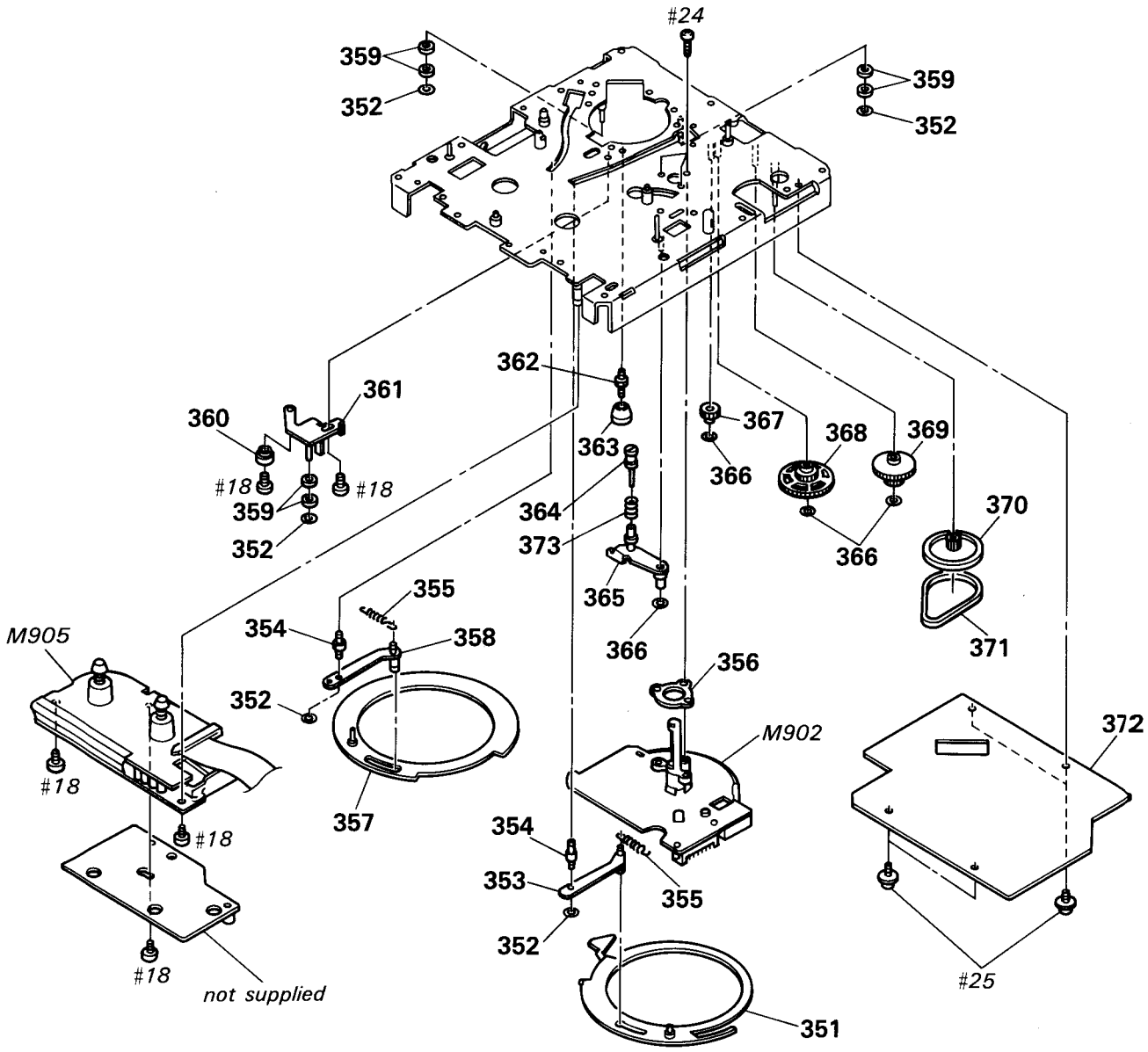
7-7. MECHANISM DECK SECTION-4 (DATM-51)



Ref. No.	Part No.	Description	Remark
* 301	1-637-602-11	S-END BOARD	
302	X-3362-028-1	SLANT BLOCK (L2) ASSY	
303	3-325-698-01	RING, RETAINING	
304	X-3362-027-1	GUIDE ASSY, ROLLER	
305	3-362-152-01	SCREW (RETURN GUIDE BOSS)	
* 306	3-337-685-01	CATCHER	
307	8-848-549-11	DRUM ASSY DOU-15A	
308	3-701-436-11	WASHER, STOPPER	

Ref. No.	Part No.	Description	Remark
309	3-307-375-00	SPRING, TENSION	
310	A-2003-487-A	ARM (CLEANING) ASSY	
311	X-3362-029-1	SLANT BLOCK (R2) ASSY	
312	3-701-437-01	SHEET (CATCHER)	
313	3-352-518-01	ROLLER (CLEANER)	
314	3-353-812-01	COLLAR (ROLLER)	
315	3-573-470-00	SPRING, COMPRESSION	
316	X-3337-655-1	ROLLER (CLEANER) ASSY	

7-8. MECHANISM DECK SECTION-5 (DATM-51)



Ref. No.	Part No.	Description	Remark
351	X-3362-204-1	GEAR (LOAD) ASSY	
352	3-559-408-11	WASHER, POLYETHYLENE, DIA. 1.2	
* 353	X-3362-025-1	LEVER (LOADING R) ASSY	
354	3-362-151-01	BOSS (GUIDE)	
355	3-337-653-01	SPRING, TENSION	
* 356	3-362-156-01	BRACKET (CAPSTAN)	
357	X-3337-602-1	RING (LEFT) ASSY, LOADING	
* 358	X-3362-024-1	LEVER (LOADING L) ASSY	
359	3-337-622-01	ROLLER, RING	
* 360	3-362-158-01	COLLAR (RING ADJUSTMENT)	
* 361	X-3362-023-1	ARM (RING ROLLER) ASSY	
* 362	3-362-159-01	SHAFT (RING ADJUSTMENT)	
363	3-362-160-01	NUT (RING ADJUSTMENT)	

Ref. No.	Part No.	Description	Remark
364	X-3362-027-1	GUIDE ASSY, ROLLER	
* 365	X-3362-020-1	LEVER (F GUIDE) ASSY	
366	3-701-436-11	WASHER, STOPPER	
367	3-372-619-01	GEAR	
368	3-345-181-01	GEAR (LOADING A)	
369	3-362-155-01	GEAR (A)	
370	4-932-338-01	PULLEY (A)	
371	4-913-325-01	BELT, TAKE-UP	
* 372	A-2006-382-A	MD BOARD, COMPLETE	
373	3-573-470-00	SPRING, COMPRESSION	
M902	8-835-306-01	MOTOR, DC U-17A (CAPSTAN)	
M905	8-835-205-01	MOTOR, DC U-2A (REEL)	

SECTION 8
ELECTRICAL PARTS LIST

AUDIO

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
.. uPC..: μPC.. uPD..: μPD..
All resistors are in ohms.
METAL:Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u:μ, for example:
uA..: μA.. uPA..: μPA..
uPB..: μPB
- CAPACITORS
uF: μF
- COILS
uH: μH

When indicating parts by reference number, please include the board.

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No.	Part No.	Description			Remark
*	A-2006-607-A	AUDIO BOARD, COMPLETE			
		**********			
	1-568-129-11	BAR, BUS 8P			
*	1-568-130-11	BAR, BUS 3P			
	7-682-147-15	SCREW, TR			
*	3-346-266-12	PLATE, GROUND			
*	4-931-401-01	HEAT SINK, V.OUT			
	7-623-508-01	LUG, 3			
		< CAPACITOR >			
C101	1-124-915-11	ELECT	10uF	20%	63V
C102	1-136-153-00	FILM	0.01uF	5%	50V
C103	1-136-153-00	FILM	0.01uF	5%	50V
C168	1-136-811-11	FILM	330PF	5%	100V
C169	1-136-808-11	FILM	100PF	5%	100V
C170	1-136-808-11	FILM	100PF	5%	100V
C171	1-136-234-11	FILM	0.0062uF	3%	100V
C172	1-136-808-11	FILM	100PF	5%	100V
C173	1-136-234-11	FILM	0.0062uF	3%	100V
C174	1-136-808-11	FILM	100PF	5%	100V
C175	1-136-228-11	FILM	0.0012uF	3%	100V
C176	1-136-233-11	FILM	0.0047uF	3%	100V
C177	1-124-918-11	ELECT	47uF	20%	63V
C178	1-109-621-00	MICA	220PF	1%	500V
C201	1-124-915-11	ELECT	10uF	20%	63V
C202	1-136-153-00	FILM	0.01uF	5%	50V
C203	1-136-153-00	FILM	0.01uF	5%	50V
C268	1-136-811-11	FILM	330PF	5%	100V
C269	1-136-808-11	FILM	100PF	5%	100V
C270	1-136-808-11	FILM	100PF	5%	100V
C271	1-136-234-11	FILM	0.0062uF	3%	100V
C272	1-136-808-11	FILM	100PF	5%	100V
C273	1-136-234-11	FILM	0.0062uF	3%	100V
C274	1-136-808-11	FILM	100PF	5%	100V
C275	1-136-228-11	FILM	0.0012uF	3%	100V
C276	1-136-233-11	FILM	0.0047uF	3%	100V
C277	1-124-918-11	ELECT	47uF	20%	63V
C278	1-109-621-00	MICA	220PF	1%	500V
C301	1-124-915-11	ELECT	10uF	20%	63V

Ref.No.	Part No.	Description			Remark
C302	1-136-165-00	FILM	0.1uF	5%	50V
C303	1-136-165-00	FILM	0.1uF	5%	50V
C304	1-136-165-00	FILM	0.1uF	5%	50V
C305	1-136-165-00	FILM	0.1uF	5%	50V
C306	1-124-484-11	ELECT	220uF	20%	35V
C307	1-124-484-11	ELECT	220uF	20%	35V
C310	1-124-713-11	ELECT	470uF	20%	35V
C311	1-136-165-00	FILM	0.1uF	5%	50V
C312	1-124-713-11	ELECT	470uF	20%	35V
C313	1-136-165-00	FILM	0.1uF	5%	50V
C314	1-124-484-11	ELECT	220uF	20%	35V
C315	1-136-165-00	FILM	0.1uF	5%	50V
C316	1-136-165-00	FILM	0.1uF	5%	50V
C317	1-124-918-11	ELECT	47uF	20%	63V
C318	1-136-165-00	FILM	0.1uF	5%	50V
C319	1-136-165-00	FILM	0.1uF	5%	50V
C320	1-136-165-00	FILM	0.1uF	5%	50V
C325	1-126-329-11	ELECT	470uF	20%	50V
C326	1-126-329-11	ELECT	470uF	20%	50V
C327	1-124-130-00	ELECT	100uF	20%	63V
C328	1-124-130-00	ELECT	100uF	20%	63V
C329	1-107-210-00	MICA	22PF	5%	500V
C330	1-107-210-00	MICA	22PF	5%	500V
C331	1-124-922-11	ELECT	1000uF	20%	63V
C332	1-124-922-11	ELECT	1000uF	20%	63V
C333	1-124-484-11	ELECT	220uF	20%	35V
C334	1-136-165-00	FILM	0.1uF	5%	50V
C335	1-136-165-00	FILM	0.1uF	5%	50V
C337	1-124-122-11	ELECT	100uF	20%	50V
C338	1-136-165-00	FILM	0.1uF	5%	50V
C339	1-136-165-00	FILM	0.1uF	5%	50V
C340	1-136-165-00	FILM	0.1uF	5%	50V
C341	1-124-122-11	ELECT	100uF	20%	50V
C342	1-136-165-00	FILM	0.1uF	5%	50V
C343	1-136-165-00	FILM	0.1uF	5%	50V
C344	1-124-122-11	ELECT	100uF	20%	50V
C345	1-136-165-00	FILM	0.1uF	5%	50V
C346	1-124-122-11	ELECT	100uF	20%	50V
C347	1-136-165-00	FILM	0.1uF	5%	50V

AUDIO

Ref. No.	Part No.	Description			Remark
C348	1-124-122-11	ELECT	100uF	20%	50V
C349	1-136-165-00	FILM	0.1uF	5%	50V
C363	1-136-153-00	FILM	0.01uF	5%	50V
C364	1-162-284-31	CERAMIC	150PF	10%	50V
C365	1-162-199-31	CERAMIC	10PF	5%	50V
C366	1-124-122-11	ELECT	100uF	20%	50V
C367	1-162-211-31	CERAMIC	33PF	5%	50V
C368	1-162-199-31	CERAMIC	10PF	5%	50V
C370	1-136-157-00	FILM	0.022uF	5%	50V
C371	1-136-165-00	FILM	0.1uF	5%	50V
C372	1-136-165-00	FILM	0.1uF	5%	50V
C373	1-136-157-00	FILM	0.022uF	5%	50V
C374	1-136-177-00	FILM	1uF	5%	50V
C375	1-136-165-00	FILM	0.1uF	5%	50V
C376	1-124-484-11	ELECT	220uF	20%	35V
C377	1-124-484-11	ELECT	220uF	20%	35V
C378	1-124-713-11	ELECT	470uF	20%	35V
C379	1-124-713-11	ELECT	470uF	20%	35V
C380	1-124-915-11	ELECT	10uF	20%	63V
C381	1-124-713-11	ELECT	470uF	20%	35V
C382	1-136-165-00	FILM	0.1uF	5%	50V
C383	1-136-165-00	FILM	0.1uF	5%	50V
C384	1-136-165-00	FILM	0.1uF	5%	50V
C385	1-136-165-00	FILM	0.1uF	5%	50V
C386	1-124-484-11	ELECT	220uF	20%	35V
C387	1-124-484-11	ELECT	220uF	20%	35V
C389	1-124-122-11	ELECT	100uF	20%	50V
C390	1-136-157-00	FILM	0.022uF	5%	50V
C391	1-136-165-00	FILM	0.1uF	5%	50V

< CONNECTOR >

* CN96	1-564-506-11	PLUG, CONNECTOR 3P	
* CN101	1-564-505-11	PLUG, CONNECTOR 2P	
* CN102	1-564-505-11	PLUG, CONNECTOR 2P	
* CN103	1-564-506-11	PLUG, CONNECTOR 3P	
* CN104	1-564-505-11	PLUG, CONNECTOR 2P	
* CN201	1-564-505-11	PLUG, CONNECTOR 2P	
* CN202	1-564-505-11	PLUG, CONNECTOR 2P	
* CN203	1-564-506-11	PLUG, CONNECTOR 3P	
* CN204	1-564-505-11	PLUG, CONNECTOR 2P	
* CN306	1-564-506-11	PLUG, CONNECTOR 3P	
* CN351	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P	
* CN352	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P	

< DIODE >

D101	8-719-107-94	DIODE	1SS202-1
D102	8-719-107-94	DIODE	1SS202-1
D201	8-719-107-94	DIODE	1SS202-1
D202	8-719-107-94	DIODE	1SS202-1
D325	8-719-902-87	DIODE	EQB01-08Q
D326	8-719-902-87	DIODE	EQB01-08Q
D349	8-719-200-77	DIODE	10E2N
D350	8-719-114-30	DIODE	RD5.1JS-B2
D351	8-719-901-59	DIODE	KV1320
D352	8-719-903-27	DIODE	1SS168
D353	8-719-107-94	DIODE	1SS202-1
D354	8-719-107-94	DIODE	1SS202-1
D355	8-719-107-94	DIODE	1SS202-1
D356	8-719-107-94	DIODE	1SS202-1
D357	8-719-200-82	DIODE	11ES2
D358	8-719-200-82	DIODE	11ES2
D359	8-719-107-94	DIODE	1SS202-1

< IC >

IC101	8-759-602-83	IC	M5238P
IC102	8-759-504-50	IC	LF412CN/SL161841
IC151	8-759-900-72	IC	NE5532P
IC152	8-759-900-72	IC	NE5532P
IC153	8-759-745-61	IC	NJM4560D-D
IC201	8-759-602-83	IC	M5238P
IC202	8-759-504-50	IC	LF412CN/SL161841
IC251	8-759-900-72	IC	NE5532P
IC252	8-759-900-72	IC	NE5532P
IC253	8-759-745-61	IC	NJM4560D-D
IC301	8-759-231-53	IC	TA7805S
IC302	8-759-245-79	IC	TA7905S
IC303	8-759-231-53	IC	TA7805S
IC304	8-759-061-94	IC	CS5326KP-A
IC305	8-759-916-55	IC	SN74HC175AN
IC348	8-752-335-51	IC	CXD2552Q-1
IC350	8-759-999-32	IC	SM5813APT
IC351	8-759-917-18	IC	SN74HCU04AN
IC354	8-759-900-72	IC	NE5532P
IC355	8-759-634-55	IC	M5F7805L-720
IC356	8-759-604-30	IC	M5F7808L
IC357	8-759-917-11	IC	SN74HC393AN
IC358	8-759-250-81	IC	TC5081AP
IC359	8-759-031-58	IC	SC7SU04F

< COIL >

L351	1-410-324-11	INDUCTOR	4.7uH
L352	1-460-042-11	COIL	(WITH CORE)
L353	1-460-042-11	COIL	(WITH CORE)
L355	1-410-324-11	INDUCTOR	4.7uH

Ref. No.	Part No.	Description		Remark
		< TRANSISTOR >		
Q325	8-729-204-90	TRANSISTOR	2SK246-GR1	
Q326	8-729-204-90	TRANSISTOR	2SK246-GR1	
Q327	8-729-803-82	TRANSISTOR	2SC3468-E	
Q328	8-729-803-76	TRANSISTOR	2SA1371-E	
Q329	8-729-127-53	TRANSISTOR	2SC2275-P	
Q330	8-729-141-10	TRANSISTOR	2SA985A-QP	
Q331	8-729-803-76	TRANSISTOR	2SA1371-E	
Q332	8-729-803-82	TRANSISTOR	2SC3468-E	
Q333	8-729-803-82	TRANSISTOR	2SC3468-E	
Q334	8-729-803-76	TRANSISTOR	2SA1371-E	
Q350	8-729-127-53	TRANSISTOR	2SC2275-P	
Q351	8-729-900-61	TRANSISTOR	DTA114ES	
Q352	8-729-200-56	TRANSISTOR	2SK241-GR	
Q353	8-729-200-56	TRANSISTOR	2SK241-GR	
Q354	8-729-900-61	TRANSISTOR	DTA114ES	
Q355	8-729-900-80	TRANSISTOR	DTC114ES	
Q356	8-729-900-61	TRANSISTOR	DTA114ES	
Q357	8-729-900-80	TRANSISTOR	DTC114ES	
Q358	8-729-900-80	TRANSISTOR	DTC114ES	
Q359	8-729-900-61	TRANSISTOR	DTA114ES	
		< RESISTOR >		
R103	1-246-545-00	CARBON	1.0M 5%	1/4W
⚠R104	1-247-717-11	CARBON	2.2K 5%	1/4W F
R105	1-249-462-11	CARBON	22K 5%	1/4W
R106	1-249-469-11	CARBON	100K 5%	1/4W
R107	1-249-520-11	CARBON	47 5%	1/4W
R108	1-249-512-11	CARBON	22 5%	1/4W
R109	1-249-524-11	CARBON	68 5%	1/4W
R152	1-249-946-11	CARBON	9.1K 1%	1/4W
R153	1-249-946-11	CARBON	9.1K 1%	1/4W
R155	1-247-721-11	CARBON	4.7K 5%	1/4W
R157	1-247-721-11	CARBON	4.7K 5%	1/4W
R158	1-247-193-00	CARBON	22K 1%	1/4W
R159	1-247-193-00	CARBON	22K 1%	1/4W
R160	1-249-941-11	CARBON	5.6K 1%	1/4W
R161	1-249-932-11	CARBON	2.4K 1%	1/4W
R162	1-246-545-00	CARBON	1.0M 5%	1/4W
R163	1-249-941-11	CARBON	5.6K 1%	1/4W
R164	1-249-941-11	CARBON	5.6K 1%	1/4W
R165	1-249-941-11	CARBON	5.6K 1%	1/4W
R166	1-249-932-11	CARBON	2.4K 1%	1/4W
R167	1-246-545-00	CARBON	1.0M 5%	1/4W
R168	1-249-556-11	CARBON	1.5K 5%	1/4W
R169	1-249-556-11	CARBON	1.5K 5%	1/4W
R170	1-249-469-11	CARBON	100K 5%	1/4W
R171	1-247-704-11	CARBON	220 5%	1/4W

Ref. No.	Part No.	Description		Remark
R173	1-247-721-11	CARBON	4.7K 5%	1/4W
R174	1-249-462-11	CARBON	22K 5%	1/4W
R175	1-247-700-11	CARBON	100 5%	1/4W
R177	1-249-497-11	CARBON	33K 5%	1/4W
R203	1-246-545-00	CARBON	1.0M 5%	1/4W
⚠R204	1-247-717-11	CARBON	2.2K 5%	1/4W F
R205	1-249-462-11	CARBON	22K 5%	1/4W
R206	1-249-469-11	CARBON	100K 5%	1/4W
R207	1-249-520-11	CARBON	47 5%	1/4W
R208	1-249-512-11	CARBON	22 5%	1/4W
R209	1-249-524-11	CARBON	68 5%	1/4W
R252	1-249-946-11	CARBON	9.1K 1%	1/4W
R253	1-249-946-11	CARBON	9.1K 1%	1/4W
R254	1-247-721-11	CARBON	4.7K 5%	1/4W
R256	1-247-721-11	CARBON	4.7K 5%	1/4W
R258	1-247-193-00	CARBON	22K 1%	1/4W
R259	1-247-193-00	CARBON	22K 1%	1/4W
R260	1-249-941-11	CARBON	5.6K 1%	1/4W
R261	1-249-932-11	CARBON	2.4K 1%	1/4W
R262	1-246-545-00	CARBON	1.0M 5%	1/4W
R263	1-249-941-11	CARBON	5.6K 1%	1/4W
R264	1-249-941-11	CARBON	5.6K 1%	1/4W
R265	1-249-941-11	CARBON	5.6K 1%	1/4W
R266	1-249-932-11	CARBON	2.4K 1%	1/4W
R267	1-246-545-00	CARBON	1.0M 5%	1/4W
R268	1-249-556-11	CARBON	1.5K 5%	1/4W
R269	1-249-556-11	CARBON	1.5K 5%	1/4W
R270	1-249-469-11	CARBON	100K 5%	1/4W
R271	1-247-704-11	CARBON	220 5%	1/4W
R273	1-247-721-11	CARBON	4.7K 5%	1/4W
R274	1-249-462-11	CARBON	22K 5%	1/4W
R275	1-247-700-11	CARBON	100 5%	1/4W
R277	1-249-497-11	CARBON	33K 5%	1/4W
R301	1-249-460-11	CARBON	15K 5%	1/4W
R302	1-247-704-11	CARBON	220 5%	1/4W
R303	1-249-504-11	CARBON	10 5%	1/4W
⚠R325	1-247-706-11	CARBON	330 5%	1/4W F
⚠R326	1-247-706-11	CARBON	330 5%	1/4W F
R327	1-247-710-11	CARBON	560 5%	1/4W
R328	1-247-710-11	CARBON	560 5%	1/4W
R329	1-249-466-11	CARBON	56K 5%	1/4W
R330	1-249-466-11	CARBON	56K 5%	1/4W
R331	1-247-719-11	CARBON	3.3K 5%	1/4W
R332	1-247-719-11	CARBON	3.3K 5%	1/4W
R333	1-249-798-11	CARBON	680 5%	1/2W
R334	1-249-798-11	CARBON	680 5%	1/2W
R335	1-247-751-11	CARBON	820 5%	1/2W
R336	1-247-751-11	CARBON	820 5%	1/2W
R353	1-247-716-11	CARBON	1.8K 5%	1/4W

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ ont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

AUDIO BAL CONV

Ref. No.	Part No.	Description				Remark
⚠R354	1-249-417-11	CARBON	1K	5%	1/4W	F
⚠R355	1-249-417-11	CARBON	1K	5%	1/4W	F
⚠R356	1-249-423-11	CARBON	3.3K	5%	1/4W	F
⚠R357	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R358	1-249-433-11	CARBON	22K	5%	1/4W	
R359	1-249-435-11	CARBON	33K	5%	1/4W	
⚠R360	1-249-417-11	CARBON	1K	5%	1/4W	F
R361	1-247-903-00	CARBON	1M	5%	1/4W	
R362	1-247-903-00	CARBON	1M	5%	1/4W	
R363	1-249-429-11	CARBON	10K	5%	1/4W	
⚠R364	1-249-428-11	CARBON	8.2K	5%	1/4W	F
R365	1-249-441-11	CARBON	100K	5%	1/4W	
⚠R366	1-249-417-11	CARBON	1K	5%	1/4W	F
⚠R367	1-249-417-11	CARBON	1K	5%	1/4W	F
⚠R368	1-249-417-11	CARBON	1K	5%	1/4W	F
R369	1-247-903-00	CARBON	1M	5%	1/4W	
⚠R370	1-249-417-11	CARBON	1K	5%	1/4W	F
⚠R371	1-212-857-00	FUSIBLE	10	5%	1/4W	F
⚠R372	1-212-857-00	FUSIBLE	10	5%	1/4W	F
⚠R373	1-249-416-11	CARBON	820	5%	1/4W	F
⚠R374	1-249-416-11	CARBON	820	5%	1/4W	F
⚠R375	1-249-416-11	CARBON	820	5%	1/4W	F
⚠R376	1-249-413-11	CARBON	470	5%	1/4W	F
⚠R377	1-249-413-11	CARBON	470	5%	1/4W	F
⚠R378	1-249-413-11	CARBON	470	5%	1/4W	F
⚠R379	1-249-413-11	CARBON	470	5%	1/4W	F
⚠R380	1-249-413-11	CARBON	470	5%	1/4W	F
R381	1-247-891-00	CARBON	330K	5%	1/4W	
⚠R382	1-249-413-11	CARBON	470	5%	1/4W	F
⚠R383	1-249-405-11	CARBON	100	5%	1/4W	F

< RELAY >

RY150	1-515-727-11	RELAY
RY250	1-515-727-11	RELAY
RY351	1-515-727-11	RELAY
RY352	1-515-772-11	RELAY

****

* A-2006-603-A BAL CONV BOARD, COMPLETE

****

< CAPACITOR >

C801	1-128-426-11	ELECT	47uF	20%	25V
C802	1-162-199-31	CERAMIC	10PF	5%	50V
C803	1-136-165-00	FILM	0.1uF	5%	50V
C804	1-136-165-00	FILM	0.1uF	5%	50V
C805	1-162-213-31	CERAMIC	39PF	5%	50V
C806	1-162-213-31	CERAMIC	39PF	5%	50V
C807	1-136-165-00	FILM	0.1uF	5%	50V
C808	1-136-165-00	FILM	0.1uF	5%	50V
C811	1-136-165-00	FILM	0.1uF	5%	50V
C812	1-128-427-11	ELECT	100uF	20%	25V
C851	1-128-426-11	ELECT	47uF	20%	25V
C852	1-162-199-31	CERAMIC	10PF	5%	50V
C853	1-136-165-00	FILM	0.1uF	5%	50V
C854	1-136-165-00	FILM	0.1uF	5%	50V
C855	1-162-213-31	CERAMIC	39PF	5%	50V
C856	1-162-213-31	CERAMIC	39PF	5%	50V
C857	1-136-165-00	FILM	0.1uF	5%	50V
C858	1-136-165-00	FILM	0.1uF	5%	50V
C861	1-136-165-00	FILM	0.1uF	5%	50V
C862	1-128-427-11	ELECT	100uF	20%	25V

< CONNECTOR >

* CN803	1-564-507-11	PLUG, CONNECTOR 4P	
* CN804	1-564-507-11	PLUG, CONNECTOR 4P	

< DIODE >

D801	8-719-987-63	DIODE	1N4148M
D802	8-719-987-63	DIODE	1N4148M
D851	8-719-987-63	DIODE	1N4148M
D852	8-719-987-63	DIODE	1N4148M

< IC >

IC801	8-759-900-72	IC	NE5532P
IC802	8-759-900-72	IC	NE5532P
IC803	8-759-900-72	IC	NE5532P
IC804	8-759-711-18	IC	NJM4556D-D
IC805	8-759-900-72	IC	NE5532P
IC806	8-759-900-72	IC	NE5532P
IC807	8-759-711-18	IC	NJM4556D-D

< RESISTOR >

R801	1-215-453-00	METAL	22K	1%	1/6W
R802	1-215-453-00	METAL	22K	1%	1/6W
R803	1-215-439-00	METAL	5.6K	1%	1/6W
R804	1-215-439-00	METAL	5.6K	1%	1/6W
R805	1-215-421-00	METAL	1K	1%	1/6W
R806	1-215-415-00	METAL	560	1%	1/6W
R807	1-215-415-00	METAL	560	1%	1/6W
R808	1-215-415-00	METAL	560	1%	1/6W
R809	1-215-469-00	METAL	100K	1%	1/6W
R810	1-215-421-00	METAL	1K	1%	1/6W
R811	1-215-433-00	METAL	3.3K	1%	1/6W
R812	1-215-445-00	METAL	10K	1%	1/6W
R813	1-215-445-00	METAL	10K	1%	1/6W
R814	1-215-437-00	METAL	4.7K	1%	1/6W
R815	1-215-447-00	METAL	12K	1%	1/6W

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

BAL CONV BAL-IN BAL-OUT BATTERY CASSET-COM MOTOR CASSET-COM SW (IN)

Ref. No.	Part No.	Description			Remark
R816	1-215-437-00	METAL	4.7K	1%	1/6W
R817	1-215-447-00	METAL	12K	1%	1/6W
R818	1-215-447-00	METAL	12K	1%	1/6W
R819	1-215-437-00	METAL	4.7K	1%	1/6W
R820	1-215-401-11	METAL	150	1%	1/6W
R821	1-215-447-00	METAL	12K	1%	1/6W
R822	1-215-437-00	METAL	4.7K	1%	1/6W
R823	1-215-401-11	METAL	150	1%	1/6W
R851	1-215-453-00	METAL	22K	1%	1/6W
R852	1-215-453-00	METAL	22K	1%	1/6W
R853	1-215-439-00	METAL	5.6K	1%	1/6W
R854	1-215-439-00	METAL	5.6K	1%	1/6W
R855	1-215-421-00	METAL	1K	1%	1/6W
R856	1-215-415-00	METAL	560	1%	1/6W
R857	1-215-415-00	METAL	560	1%	1/6W
R858	1-215-415-00	METAL	560	1%	1/6W
R859	1-215-469-00	METAL	100K	1%	1/6W
R860	1-215-421-00	METAL	1K	1%	1/6W
R861	1-215-433-00	METAL	3.3K	1%	1/6W
R862	1-215-445-00	METAL	10K	1%	1/6W
R863	1-215-445-00	METAL	10K	1%	1/6W
R864	1-215-437-00	METAL	4.7K	1%	1/6W
R865	1-215-447-00	METAL	12K	1%	1/6W
R866	1-215-437-00	METAL	4.7K	1%	1/6W
R867	1-215-447-00	METAL	12K	1%	1/6W
R868	1-215-447-00	METAL	12K	1%	1/6W
R869	1-215-437-00	METAL	4.7K	1%	1/6W
R870	1-215-401-11	METAL	150	1%	1/6W
R871	1-215-447-00	METAL	12K	1%	1/6W
R872	1-215-437-00	METAL	4.7K	1%	1/6W
R873	1-215-401-11	METAL	150	1%	1/6W
		< VARIABLE RESISTOR >			
RV801	1-237-605-11	RES, ADJ, METAL GRAZE 10K			
RV802	1-237-605-11	RES, ADJ, METAL GRAZE 10K			
RV803	1-237-605-11	RES, ADJ, METAL GRAZE 10K			
RV804	1-237-605-11	RES, ADJ, METAL GRAZE 10K			
**********					
*	1-640-286-11	BAL-IN BOARD			
		**********			
		< CONNECTOR >			
* CN806	1-564-509-11	PLUG, CONNECTOR 6P			
		< CONNECTOR >			
J801	1-568-006-11	CONNECTOR, XLR TYPE 3P(ANALOG INPUT CH1)			
J802	1-568-006-11	CONNECTOR, XLR TYPE 3P(ANALOG INPUT CH2)			
**********					

Ref. No.	Part No.	Description			Remark
*	1-640-287-12	BAL-OUT BOARD			
		**********			
		< CAPACITOR >			
C809	1-126-024-11	ELECT	220uF	20%	25V
C810	1-126-024-11	ELECT	220uF	20%	25V
C859	1-126-024-11	ELECT	220uF	20%	25V
C860	1-126-024-11	ELECT	220uF	20%	25V
		< CONNECTOR >			
* CN807	1-564-521-11	PLUG, CONNECTOR 6P			
		< CONNECTOR >			
J803	1-568-005-11	CONNECTOR, XLR TYPE 3P (ANALOG OUTPUT CH1)			
J804	1-568-005-11	CONNECTOR, XLR TYPE 3P (ANALOG OUTPUT CH2)			
		< RESISTOR >			
R824	1-215-469-00	METAL	100K	1%	1/6W
R825	1-215-469-00	METAL	100K	1%	1/6W
R874	1-215-469-00	METAL	100K	1%	1/6W
R875	1-215-469-00	METAL	100K	1%	1/6W
**********					
*	1-637-626-11	BATTERY BOARD			
		**********			
		< BATTERY >			
⚠BATT01	1-528-229-11	BATTERY, LITHIUM CR-2450			
**********					
*	1-633-726-11	CASSET-COM MOTOR BOARD			
		**********			
		< CAPACITOR >			
C01	1-162-851-11	CERAMIC	0.1MF		16V
		< CONNECTOR >			
* CN01	1-564-336-00	PIN, CONNECTOR 2P			
* CN02	1-564-336-61	PIN, CONNECTOR 2P			
* CN03	1-564-498-11	PIN, CONNECTOR 5P			
**********					
*	1-633-727-11	CASSET-COM SW (IN) BOARD			
		**********			
		< SWITCH >			
S11	1-572-247-11	SWITCH, SLIDE (CASSETTE TABLE IN)			
**********					

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

CASSET-COM SW (OUT) CONTROL SW

Ref. No.	Part No.	Description			Remark
*	1-633-728-11	CASSET-COM SW (OUT) BOARD			
		**********			
		< SWITCH >			
S12	1-570-975-11	SWITCH, SLIDE (CASSETTE TABLE OUT)			
**********					
*	A-2006-601-A	CONTROL SW BOARD, COMPLETE			
		**********			
	9-911-839-XX	CUSHION			
*	4-911-676-01	SPACER, LED			
		< CAPACITOR >			
C702	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C703	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C704	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C705	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C706	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C708	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C709	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C710	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C711	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C712	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C713	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C714	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C715	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C722	1-124-779-00	ELECT CHIP	10uF	20%	16V
C723	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C724	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C725	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C726	1-163-038-00	CERAMIC CHIP	0.1uF		25V
		< CONNECTOR >			
* CN772	1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P			
* CN773	1-564-339-00	PIN, CONNECTOR 5P			
		< TRIMMER >			
CT701	1-141-334-11	CAP, VAR, TRIMMER			
		< DIODE >			
D701	8-719-304-16	LED	SEL2510W-D		
D702	8-719-918-76	LED	GL-3PR9		
D705	8-719-934-34	LED	AA3432S		
D706	8-719-934-34	LED	AA3432S		
D707	8-719-304-16	LED	SEL2510W-D		
D709	8-719-934-34	LED	AA3432S		
D710	8-719-934-34	LED	AA3432S		
D711	8-719-934-34	LED	AA3432S		
D712	8-719-934-34	LED	AA3432S		
D713	8-719-934-34	LED	AA3432S		
D714	8-719-934-34	LED	AA3432S		
D715	8-719-934-34	LED	AA3432S		
D716	8-719-934-34	LED	AA3432S		
D718	8-719-938-75	DIODE	SB05-05CP		
D719	8-719-938-75	DIODE	SB05-05CP		
D720	8-719-938-75	DIODE	SB05-05CP		
D721	8-719-938-75	DIODE	SB05-05CP		
		< FLUORESCENT INDICATOR TUBE >			
FL701	1-519-601-11	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC701	8-759-520-54	IC	MSC62408-044GS-V1KA		
IC702	8-752-326-33	IC	CXK1011M		
IC703	8-759-009-05	IC	MC14051BF		
IC704	8-759-009-05	IC	MC14051BF		
IC705	8-759-009-10	IC	MC14069UBF		
IC706	8-759-502-84	IC	LM393M		
IC707	8-759-630-70	IC	M50782FP		
IC709	8-759-500-05	IC	MSM6338MS-K		
IC712	8-759-504-23	IC	RF5C62		
		< TRANSISTOR >			
Q701	8-729-901-04	TRANSISTOR	DTA114EK		
Q702	8-729-901-04	TRANSISTOR	DTA114EK		
Q705	8-729-901-04	TRANSISTOR	DTA114EK		
Q706	8-729-901-04	TRANSISTOR	DTA114EK		
Q707	8-729-901-04	TRANSISTOR	DTA114EK		
Q709	8-729-901-04	TRANSISTOR	DTA114EK		
Q710	8-729-901-04	TRANSISTOR	DTA114EK		
Q711	8-729-901-04	TRANSISTOR	DTA114EK		
Q712	8-729-901-04	TRANSISTOR	DTA114EK		
Q713	8-729-901-04	TRANSISTOR	DTA114EK		
Q714	8-729-901-04	TRANSISTOR	DTA114EK		
Q715	8-729-901-04	TRANSISTOR	DTA114EK		
Q716	8-729-901-04	TRANSISTOR	DTA114EK		
Q717	8-729-901-04	TRANSISTOR	DTA114EK		
Q718	8-729-807-16	TRANSISTOR	2SD1621-R		
Q719	8-729-900-98	TRANSISTOR	DTC143TK		
Q720	8-729-900-98	TRANSISTOR	DTC143TK		
Q721	8-729-900-98	TRANSISTOR	DTC143TK		
Q722	8-729-900-98	TRANSISTOR	DTC143TK		
Q723	8-729-900-98	TRANSISTOR	DTC143TK		
Q724	8-729-900-98	TRANSISTOR	DTC143TK		
Q725	8-729-900-98	TRANSISTOR	DTC143TK		
Q726	8-729-900-98	TRANSISTOR	DTC143TK		

Ref. No.	Part No.	Description			Remark
Q727	8-729-807-16	TRANSISTOR	2SD1621-R		
Q728	8-729-100-66	TRANSISTOR	2SC1623-L6		
Q730	8-729-901-00	TRANSISTOR	DTC124EK		
Q732	8-729-807-16	TRANSISTOR	2SD1621-R		
		< RESISTOR >			
R701	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R702	1-216-045-00	METAL CHIP	680	5%	1/10W
R703	1-216-047-00	METAL CHIP	820	5%	1/10W
R704	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R705	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R706	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R707	1-216-045-00	METAL CHIP	680	5%	1/10W
R708	1-216-047-00	METAL CHIP	820	5%	1/10W
R709	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R710	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R711	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R712	1-216-045-00	METAL CHIP	680	5%	1/10W
R713	1-216-047-00	METAL CHIP	820	5%	1/10W
R714	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R715	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R716	1-216-045-00	METAL CHIP	680	5%	1/10W
R717	1-216-047-00	METAL CHIP	820	5%	1/10W
R718	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R719	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R720	1-216-045-00	METAL CHIP	680	5%	1/10W
R721	1-216-047-00	METAL CHIP	820	5%	1/10W
R722	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R723	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R724	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R725	1-216-045-00	METAL CHIP	680	5%	1/10W
R726	1-216-047-00	METAL CHIP	820	5%	1/10W
R727	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R728	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R729	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R730	1-216-045-00	METAL CHIP	680	5%	1/10W
R731	1-216-047-00	METAL CHIP	820	5%	1/10W
R732	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R733	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R734	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R735	1-216-045-00	METAL CHIP	680	5%	1/10W
R736	1-216-047-00	METAL CHIP	820	5%	1/10W
R737	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R739	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R740	1-216-045-00	METAL CHIP	680	5%	1/10W
R741	1-216-047-00	METAL CHIP	820	5%	1/10W
R742	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R743	1-216-057-00	METAL CHIP	2.2K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R744	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R745	1-216-045-00	METAL CHIP	680	5%	1/10W
R746	1-216-047-00	METAL CHIP	820	5%	1/10W
R747	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R749	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R751	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R753	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R755	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R756	1-216-045-00	METAL CHIP	680	5%	1/10W
R757	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R758	1-216-045-00	METAL CHIP	680	5%	1/10W
R759	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R760	1-216-045-00	METAL CHIP	680	5%	1/10W
R761	1-216-033-00	METAL CHIP	220	5%	1/10W
R762	1-216-033-00	METAL CHIP	220	5%	1/10W
R765	1-216-033-00	METAL CHIP	220	5%	1/10W
R766	1-216-033-00	METAL CHIP	220	5%	1/10W
R767	1-216-033-00	METAL CHIP	220	5%	1/10W
R769	1-216-033-00	METAL CHIP	220	5%	1/10W
R770	1-216-033-00	METAL CHIP	220	5%	1/10W
R771	1-216-033-00	METAL CHIP	220	5%	1/10W
R772	1-216-033-00	METAL CHIP	220	5%	1/10W
R773	1-216-033-00	METAL CHIP	220	5%	1/10W
R774	1-216-033-00	METAL CHIP	220	5%	1/10W
R775	1-216-033-00	METAL CHIP	220	5%	1/10W
R776	1-216-033-00	METAL CHIP	220	5%	1/10W
R777	1-216-682-11	METAL CHIP	20K	0.5%	1/10W
R778	1-216-682-11	METAL CHIP	20K	0.5%	1/10W
R779	1-216-682-11	METAL CHIP	20K	0.5%	1/10W
R780	1-216-682-11	METAL CHIP	20K	0.5%	1/10W
R781	1-216-073-00	METAL CHIP	10K	5%	1/10W
R782	1-216-675-11	METAL CHIP	10K	0.5%	1/10W
R783	1-216-675-11	METAL CHIP	10K	0.5%	1/10W
R784	1-216-675-11	METAL CHIP	10K	0.5%	1/10W
R785	1-216-682-11	METAL CHIP	20K	0.5%	1/10W
R786	1-216-682-11	METAL CHIP	20K	0.5%	1/10W
R787	1-216-097-00	METAL CHIP	100K	5%	1/10W
R788	1-216-097-00	METAL CHIP	100K	5%	1/10W
R789	1-216-097-00	METAL CHIP	100K	5%	1/10W
R790	1-216-097-00	METAL CHIP	100K	5%	1/10W
R791	1-216-097-00	METAL CHIP	100K	5%	1/10W
R792	1-216-097-00	METAL CHIP	100K	5%	1/10W
R793	1-216-097-00	METAL CHIP	100K	5%	1/10W
R794	1-216-097-00	METAL CHIP	100K	5%	1/10W
R795	1-216-097-00	METAL CHIP	100K	5%	1/10W
R796	1-216-089-00	METAL CHIP	47K	5%	1/10W
R797	1-216-089-00	METAL CHIP	47K	5%	1/10W
R800	1-216-073-00	METAL CHIP	10K	5%	1/10W

CONTROL SW D-SUB

Ref. No.	Part No.	Description			Remark
R801	1-216-073-00	METAL CHIP	10K	5%	1/10W
R802	1-216-121-00	METAL CHIP	1M	5%	1/10W
R803	1-216-047-00	METAL CHIP	820	5%	1/10W
R804	1-216-047-00	METAL CHIP	820	5%	1/10W
⚠R805	1-212-851-00	FUSIBLE	5.6	5%	1/4W F
⚠R806	1-212-851-00	FUSIBLE	5.6	5%	1/4W F
R809	1-216-097-00	METAL CHIP	100K	5%	1/10W
R810	1-216-073-00	METAL CHIP	10K	5%	1/10W
R811	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R813	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R814	1-216-097-00	METAL CHIP	100K	5%	1/10W
R815	1-216-033-00	METAL CHIP	220	5%	1/10W
R816	1-216-073-00	METAL CHIP	10K	5%	1/10W
R817	1-216-073-00	METAL CHIP	10K	5%	1/10W
R818	1-216-073-00	METAL CHIP	10K	5%	1/10W
R819	1-216-073-00	METAL CHIP	10K	5%	1/10W
R820	1-216-073-00	METAL CHIP	10K	5%	1/10W
R821	1-216-073-00	METAL CHIP	10K	5%	1/10W
R822	1-216-073-00	METAL CHIP	10K	5%	1/10W
R823	1-216-073-00	METAL CHIP	10K	5%	1/10W
R824	1-216-073-00	METAL CHIP	10K	5%	1/10W
R827	1-216-047-00	METAL CHIP	820	5%	1/10W
R829	1-216-051-00	METAL CHIP	1.2K	5%	1/10W

< SWITCH >

S701	1-554-937-11	SWITCH, KEY BOARD (⏏ OPEN/CLOSE)
S702	1-554-937-11	SWITCH, KEY BOARD (■)
S704	1-554-937-11	SWITCH, KEY BOARD (▶)
S705	1-554-937-11	SWITCH, KEY BOARD (⏮)
S706	1-554-937-11	SWITCH, KEY BOARD (⏭)
S707	1-554-937-11	SWITCH, KEY BOARD (◀◀)
S708	1-554-937-11	SWITCH, KEY BOARD (▶▶)
S709	1-554-937-11	SWITCH, KEY BOARD (● REC)
S710	1-554-937-11	SWITCH, KEY BOARD (❚❚ PAUSE)
S711	1-554-937-11	SWITCH, KEY BOARD (◎ REC MUTE)
S712	1-554-937-11	SWITCH, KEY BOARD (COUNTER MODE)
S713	1-554-937-11	SWITCH, KEY BOARD (COUNTER RESET)
S714	1-554-937-11	SWITCH, KEY BOARD (COUNTER MEMORY)
S715	1-554-937-11	SWITCH, KEY BOARD (DATE RECORDED)
S716	1-554-937-11	SWITCH, KEY BOARD (DATE PRESET)
S717	1-554-937-11	SWITCH, KEY BOARD (SKIP PLAY)
S718	1-554-937-11	SWITCH, KEY BOARD (FADER)
S720	1-554-937-11	SWITCH, KEY BOARD (REPEAT)
S722	1-554-937-11	SWITCH, KEY BOARD (MARGIN RESET)
S723	1-554-937-11	SWITCH, KEY BOARD (1)
S724	1-554-937-11	SWITCH, KEY BOARD (2)
S725	1-554-937-11	SWITCH, KEY BOARD (3)
S726	1-554-937-11	SWITCH, KEY BOARD (CLOCK SET)
S727	1-554-937-11	SWITCH, KEY BOARD (4)
S728	1-554-937-11	SWITCH, KEY BOARD (5)
S729	1-554-937-11	SWITCH, KEY BOARD (6)
S730	1-554-937-11	SWITCH, KEY BOARD (COPY PROHIBIT/+)
S731	1-554-937-11	SWITCH, KEY BOARD (CLEAR)
S732	1-554-937-11	SWITCH, KEY BOARD (7)
S733	1-554-937-11	SWITCH, KEY BOARD (8)
S734	1-554-937-11	SWITCH, KEY BOARD (9)
S735	1-554-937-11	SWITCH, KEY BOARD (0/-)
S736	1-554-937-11	SWITCH, KEY BOARD (START ID AUTO)
S737	1-554-937-11	SWITCH, KEY BOARD (START ID WRITE)
S738	1-554-937-11	SWITCH, KEY BOARD (SKIP ID WRITE)
S739	1-554-937-11	SWITCH, KEY BOARD (END ID WRITE)
S740	1-554-937-11	SWITCH, KEY BOARD (TIME SEARCH)
S741	1-554-937-11	SWITCH, KEY BOARD (START ID REMEMBER)
S742	1-554-937-11	SWITCH, KEY BOARD (START ID ERASE)
S743	1-554-937-11	SWITCH, KEY BOARD (SKIP ID ERASE)
S744	1-554-937-11	SWITCH, KEY BOARD (END ID ERASE)

< VIBRATOR >

X701	1-567-775-11	VIBRATOR, CERAMIC 4.19MHz
X702	1-567-098-00	OSCILLATOR, CRYSTAL 32.8kHz

****

* 1-640-288-11 D-SUB BOARD

****

< CAPACITOR >

C881	1-124-443-00	ELECT	100uF	20%	10V
C882	1-136-165-00	FILM	0.1uF	5%	50V
C884	1-162-294-31	CERAMIC	0.001uF	10%	50V
C885	1-162-294-31	CERAMIC	0.001uF	10%	50V
C886	1-162-294-31	CERAMIC	0.001uF	10%	50V
C887	1-162-294-31	CERAMIC	0.001uF	10%	50V
C888	1-162-294-31	CERAMIC	0.001uF	10%	50V
C889	1-162-294-31	CERAMIC	0.001uF	10%	50V
C890	1-162-294-31	CERAMIC	0.001uF	10%	50V
C891	1-162-294-31	CERAMIC	0.001uF	10%	50V
C892	1-162-294-31	CERAMIC	0.001uF	10%	50V

< IC >

IC808	8-759-041-98	IC TD62382AP
IC809	8-759-041-98	IC TD62382AP

< CONNECTOR >

* J805	1-573-693-11	CONNECTOR, D-SUB 37P

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R882	1-215-417-00	METAL	680	1%	1/6W
R883	1-215-419-00	METAL	820	1%	1/6W
R884	1-215-423-00	METAL	1.2K	1%	1/6W
R885	1-215-429-00	METAL	2.2K	1%	1/6W
R887	1-215-417-00	METAL	680	1%	1/6W
R888	1-215-419-00	METAL	820	1%	1/6W
R889	1-215-423-00	METAL	1.2K	1%	1/6W
R890	1-215-429-00	METAL	2.2K	1%	1/6W
R891	1-215-445-00	METAL	10K	1%	1/6W
R892	1-215-445-00	METAL	10K	1%	1/6W
R893	1-215-445-00	METAL	10K	1%	1/6W
R894	1-215-445-00	METAL	10K	1%	1/6W
**********					
*	A-2006-826-A	DIG-I/O BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C051	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C052	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C053	1-162-179-11	CERAMIC	0.1uF		50V
C054	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C055	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C056	1-136-169-00	FILM	0.22uF	5%	50V
C057	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C058	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C059	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C060	1-136-169-00	FILM	0.22uF	5%	50V
C061	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C062	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C063	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C064	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C065	1-126-133-11	ELECT	100uF	20%	6.3V
C066	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C067	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C068	1-163-038-00	CERAMIC CHIP	0.1uF		25V
		< DIODE >			
D052	8-719-800-76	DIODE	1SS226		
D053	8-719-800-76	DIODE	1SS226		
D054	8-719-800-76	DIODE	1SS226		
D055	8-719-800-76	DIODE	1SS226		
		< IC >			
IC051	8-759-239-23	IC	TC74HC86AF		
IC052	8-759-927-46	IC	SN74HC00ANS		
IC053	8-759-077-32	IC	SN75ALS181N		
IC054	8-759-031-58	IC	SC7SU04F		

Ref. No.	Part No.	Description			Remark
		< JACK >			
J051	1-568-750-21	JACK, PIN (1P SHIELD TYPE) (COAX IN)			
J052	1-565-406-41	JACK, PIN 1P (COAX OUT)			
J053	1-568-006-11	CONNECTOR, XLR TYPE 3P (AES/EBU IN)			
J054	1-568-005-11	CONNECTOR, XLR TYPE 3P (AES EBU OUT)			
		< TRANSISTOR >			
Q051	8-729-113-13	TRANSISTOR	FA1A4M-L33		
Q052	8-729-113-13	TRANSISTOR	FA1A4M-L33		
		< RESISTOR >			
R051	1-216-029-00	METAL CHIP	150	5%	1/10W
R052	1-216-029-00	METAL CHIP	150	5%	1/10W
R053	1-216-013-00	METAL CHIP	33	5%	1/10W
R054	1-216-022-00	METAL CHIP	75	5%	1/10W
R055	1-216-025-00	METAL CHIP	100	5%	1/10W
R056	1-216-001-00	METAL CHIP	10	5%	1/10W
R057	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R058	1-216-081-00	METAL CHIP	22K	5%	1/10W
R059	1-216-077-00	METAL CHIP	15K	5%	1/10W
R061	1-216-033-00	METAL CHIP	220	5%	1/10W
R062	1-216-033-00	METAL CHIP	220	5%	1/10W
R063	1-216-025-00	METAL CHIP	100	5%	1/10W
R064	1-216-025-00	METAL CHIP	100	5%	1/10W
R065	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R066	1-216-001-00	METAL CHIP	10	5%	1/10W
R067	1-216-001-00	METAL CHIP	10	5%	1/10W
R068	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R069	1-216-089-00	METAL CHIP	47K	5%	1/10W
		< SWITCH >			
S051	1-570-707-21	SWITCH, SLIDE			
S052	1-571-426-11	SWITCH, SLIDE			
		< TRANSFORMER >			
T051	1-459-795-11	COIL (WITH CORE)			
T052	1-437-194-21	TRANSFORMER, PULSE			
T053	1-437-194-21	TRANSFORMER, PULSE			
**********					
*	A-2006-831-A	DIGITAL BOARD, COMPLETE			
		**********			
	1-543-843-11	BEAD, FERRITE			
	4-352-844-01	PIN, LEAD, COATING			
		< CONNECTOR >			
* BAT501	1-564-336-81	PIN, CONNECTOR 2P			

Ref. No.	Part No.	Description			Remark
		< CAPACITOR >			
C502	1-126-022-11	ELECT	47uF	20%	16V
C503	1-136-153-00	FILM	0.01uF	5%	50V
C504	1-136-158-00	FILM	0.027uF	5%	50V
C505	1-130-473-00	MYLAR	0.0015uF	5%	50V
C506	1-126-022-11	ELECT	47uF	20%	10V
C507	1-136-153-00	FILM	0.01uF	5%	50V
C508	1-136-158-00	FILM	0.027uF	5%	50V
C509	1-130-473-00	MYLAR	0.0015uF	5%	50V
C510	1-126-022-11	ELECT	47uF	20%	10V
C511	1-162-290-31	CERAMIC	470PF	10%	50V
C512	1-130-479-00	MYLAR	0.0047uF	5%	50V
C513	1-126-049-11	ELECT	22uF	20%	10V
C514	1-162-290-31	CERAMIC	470PF	10%	50V
C515	1-130-479-00	MYLAR	0.0047uF	5%	50V
C516	1-126-049-11	ELECT	22uF	20%	10V
C517	1-136-153-00	FILM	0.01uF	5%	50V
C518	1-136-158-00	FILM	0.027uF	5%	50V
C519	1-130-473-00	MYLAR	0.0015uF	5%	50V
C520	1-136-153-00	FILM	0.01uF	5%	50V
C521	1-130-473-00	MYLAR	0.0015uF	5%	50V
C522	1-136-158-00	FILM	0.027uF	5%	50V
C523	1-126-157-11	ELECT	10uF	20%	16V
C524	1-126-022-11	ELECT	47uF	20%	16V
C525	1-126-022-11	ELECT	47uF	20%	16V
C527	1-136-165-00	FILM	0.1uF	5%	50V
C528	1-126-049-11	ELECT	22uF	20%	10V
C529	1-124-994-11	ELECT	100uF	20%	10V
C535	1-136-165-00	FILM	0.1uF	5%	50V
C536	1-130-475-00	MYLAR	0.0022uF	5%	50V
C537	1-136-153-00	FILM	0.01uF	5%	50V
C538	1-130-475-00	MYLAR	0.0022uF	5%	50V
C539	1-136-153-00	FILM	0.01uF	5%	50V
C540	1-126-022-11	ELECT	47uF	20%	10V
C542	1-164-159-11	CERAMIC	0.1uF		50V
C543	1-124-994-11	ELECT	100uF	20%	10V
C545	1-126-022-11	ELECT	47uF	20%	16V
C546	1-164-159-11	CERAMIC	0.1uF		50V
C547	1-164-159-11	CERAMIC	0.1uF		50V
C548	1-124-994-11	ELECT	100uF	20%	10V
C549	1-124-994-11	ELECT	100uF	20%	10V
C552	1-136-165-00	FILM	0.1uF	5%	50V
C554	1-164-159-11	CERAMIC	0.1uF		50V
C555	1-164-159-11	CERAMIC	0.1uF		50V
C556	1-162-211-31	CERAMIC	33PF	5%	50V
C557	1-136-165-00	FILM	0.1uF	5%	50V
C558	1-161-379-00	CERAMIC	0.01uF	20%	25V
C559	1-126-157-11	ELECT	10uF	20%	16V

Ref. No.	Part No.	Description			Remark
C560	1-126-022-11	ELECT	47uF	20%	10V
C561	1-164-159-11	CERAMIC	0.1uF		50V
C562	1-162-201-31	CERAMIC	12PF	5%	50V
C563	1-162-201-31	CERAMIC	12PF	5%	50V
C564	1-162-294-31	CERAMIC	0.001uF	10%	50V
C565	1-136-177-00	FILM	1uF	5%	50V
C566	1-124-994-11	ELECT	100uF	20%	10V
C567	1-164-159-11	CERAMIC	0.1uF		50V
C569	1-162-201-31	CERAMIC	12PF	5%	50V
C570	1-162-201-31	CERAMIC	12PF	5%	50V
C571	1-162-294-31	CERAMIC	0.001uF	10%	50V
C572	1-162-199-31	CERAMIC	10PF	5%	50V
C573	1-162-199-31	CERAMIC	10PF	5%	50V
C574	1-162-179-11	CERAMIC	0.1uF		50V
C576	1-164-159-11	CERAMIC	0.1uF		50V
C577	1-162-294-31	CERAMIC	0.001uF	10%	50V
C578	1-164-159-11	CERAMIC	0.1uF		50V
C579	1-124-994-11	ELECT	100uF	20%	10V
C580	1-164-159-11	CERAMIC	0.1uF		50V
C582	1-164-159-11	CERAMIC	0.1uF		50V
C583	1-164-159-11	CERAMIC	0.1uF		50V
C584	1-164-159-11	CERAMIC	0.1uF		50V
C585	1-126-022-11	ELECT	47uF	20%	10V
C586	1-162-294-31	CERAMIC	0.001uF	10%	50V
C587	1-126-044-11	ELECT	1uF	20%	50V
C589	1-136-165-00	FILM	0.1uF	5%	50V
C590	1-124-995-11	ELECT	220uF	20%	10V
C591	1-162-207-31	CERAMIC	22PF	5%	50V
C592	1-136-165-00	FILM	0.1uF	5%	50V
C593	1-124-995-11	ELECT	220uF	20%	10V
C595	1-164-159-11	CERAMIC	0.1uF		50V
C596	1-164-159-11	CERAMIC	0.1uF		50V
C598	1-124-994-11	ELECT	100uF	20%	10V
C599	1-136-165-00	FILM	0.1uF	5%	50V
C600	1-136-153-00	FILM	0.01uF	5%	50V
C601	1-136-165-00	FILM	0.1uF	5%	50V
C602	1-136-165-00	FILM	0.1uF	5%	50V
C604	1-126-022-11	ELECT	47uF	20%	10V
C605	1-136-165-00	FILM	0.1uF	5%	50V
C606	1-126-157-11	ELECT	10uF	20%	16V
C607	1-124-994-11	ELECT	100uF	20%	10V
C608	1-164-159-11	CERAMIC	0.1uF		50V
C609	1-136-153-00	FILM	0.01uF	5%	50V
C610	1-136-157-00	FILM	0.022uF	5%	50V
C611	1-136-157-00	FILM	0.022uF	5%	50V
C612	1-162-294-31	CERAMIC	0.001uF	10%	50V
C613	1-162-294-31	CERAMIC	0.001uF	10%	50V
C614	1-136-153-00	FILM	0.01uF	5%	50V

Ref. No.	Part No.	Description			Remark
C615	1-136-153-00	FILM	0.01uF	5%	50V
C616	1-162-290-31	CERAMIC	470PF	10%	50V
C617	1-161-377-00	CERAMIC	0.0047uF	30%	16V
C618	1-162-294-31	CERAMIC	0.001uF	10%	50V
C619	1-124-994-11	ELECT	100uF	20%	10V
C620	1-162-294-31	CERAMIC	0.001uF	10%	50V
C622	1-162-294-31	CERAMIC	0.001uF	10%	50V
C623	1-124-994-11	ELECT	100uF	20%	10V
C624	1-162-294-31	CERAMIC	0.001uF	10%	50V
C625	1-162-199-31	CERAMIC	10PF	5%	50V
C626	1-164-159-11	CERAMIC	0.1uF		50V
C627	1-164-159-11	CERAMIC	0.1uF		50V
C628	1-136-153-00	FILM	0.01uF	5%	50V
C629	1-164-159-11	CERAMIC	0.1uF		50V
C630	1-124-925-11	ELECT	2.2uF	20%	100V
C634	1-162-294-31	CERAMIC	0.001uF	10%	50V
C635	1-162-294-31	CERAMIC	0.001uF	10%	50V
C636	1-136-165-00	FILM	0.1uF	5%	50V
C637	1-136-165-00	FILM	0.1uF	5%	50V
C638	1-136-165-00	FILM	0.1uF	5%	50V
C640	1-164-159-11	CERAMIC	0.1uF		50V
C641	1-162-294-31	CERAMIC	0.001uF	10%	50V
C642	1-136-153-00	FILM	0.01uF	5%	50V

< CONNECTOR >

* CN501	1-564-715-11	PIN, CONNECTOR (SMALL TYPE)	13P
* CN502	1-564-710-11	PIN, CONNECTOR (SMALL TYPE)	8P
* CN503	1-564-507-11	PLUG, CONNECTOR	4P
* CN504	1-564-511-11	PLUG, CONNECTOR	8P
* CN505	1-564-506-11	PLUG, CONNECTOR	3P
* CN506	1-564-339-00	PIN, CONNECTOR	5P
* CN507	1-564-714-11	PIN, CONNECTOR (SMALL TYPE)	12P
* CN508	1-564-711-11	PIN, CONNECTOR (SMALL TYPE)	9P
* CN531	1-564-709-11	PIN, CONNECTOR (SMALL TYPE)	7P
* CN532	1-564-706-11	PIN, CONNECTOR (SMALL TYPE)	4P
* CN533	1-564-339-61	PIN, CONNECTOR	5P
* CN535	1-564-338-61	PIN, CONNECTOR	4P
* CN537	1-564-337-61	PIN, CONNECTOR	3P
* CN551	1-564-514-11	PLUG, CONNECTOR	11P
* CN552	1-564-514-11	PLUG, CONNECTOR	11P
* CN553	1-564-510-11	PLUG, CONNECTOR	7P
* CN571	1-506-503-11	PIN, CONNECTOR	9P
* CN572	1-564-339-61	PIN, CONNECTOR	5P
* CN573	1-564-336-00	PIN, CONNECTOR	2P
* CN574	1-564-509-11	PLUG, CONNECTOR	6P
* CN581	1-564-342-11	PIN, CONNECTOR	8P
* CN582	1-564-342-61	PIN, CONNECTOR	8P
* CN583	1-564-342-11	PIN, CONNECTOR	8P
* CN584	1-564-707-11	PIN, CONNECTOR (SMALL TYPE)	5P
* CN585	1-564-708-11	PIN, CONNECTOR (SMALL TYPE)	6P
* CN591	1-564-508-11	PLUG, CONNECTOR	5P
* CN592	1-564-510-11	PLUG, CONNECTOR	7P

< DIODE >

D501	8-719-109-72	DIODE	RD3.9ES-B2
D502	8-719-109-66	DIODE	RD3.3ES-B2
D505	8-719-200-77	DIODE	10E2N
D506	8-719-107-94	DIODE	1SS202-1

< IC >

IC501	8-752-837-43	IC	CXP80524-065Q
IC502	8-752-339-43	IC	CXD2601AQ
IC503	8-752-339-43	IC	CXD2601AQ
IC504	8-759-947-57	IC	CXD1136Q
IC505	8-752-030-63	IC	CXA1046M
IC506	8-752-337-80	IC	CXK58257AM-12L
IC507	8-752-337-80	IC	CXK58257AM-12L
IC508	8-759-135-80	IC	uPC358C
IC509	8-759-135-80	IC	uPC358C
IC510	8-759-135-80	IC	uPC358C
IC511	8-759-135-80	IC	uPC358C
IC512	8-759-916-20	IC	SN74HC14AN
IC513	8-759-633-65	IC	M54641L
IC514	8-759-633-65	IC	M54641L
IC515	8-759-987-16	IC	LM393P
IC516	8-759-239-47	IC	TC74HC123AP
IC517	8-759-144-82	IC	uPC2405HF
IC519	8-759-036-44	IC	MC74AC74N
IC520	8-759-916-14	IC	SN74HC04AN
IC521	8-759-916-12	IC	TC74HC00AN
IC522	8-759-135-80	IC	uPC358C
IC525	8-759-916-50	IC	SN74HC157AN
IC526	8-759-916-14	IC	SN74HC04AN
IC527	8-759-916-55	IC	SN74HC175AN
IC528	8-759-916-14	IC	SN74HC04AN
IC529	8-759-906-24	IC	SN74LS624N
IC530	8-759-916-50	IC	SN74HC157AN
IC531	8-759-916-55	IC	TC74HC175AN
IC532	8-759-916-50	IC	SN74HC157AN
IC533	8-759-916-16	IC	SN74HC08AN
IC534	8-759-504-22	IC	TDA1543
IC535	8-759-135-80	IC	uPC358C
IC536	8-759-135-80	IC	uPC358C

< COIL >

L501	1-410-509-11	INDUCTOR	10uH
L502	1-410-509-11	INDUCTOR	10uH

Ref. No.	Part No.	Description	Remark
L503	1-410-509-11	INDUCTOR 10uH	
L504	1-410-509-11	INDUCTOR 10uH	
L505	1-410-509-11	INDUCTOR 10uH	
L506	1-410-509-11	INDUCTOR 10uH	
L507	1-410-509-11	INDUCTOR 10uH	
L508	1-410-498-11	INDUCTOR 1.2uH	
L509	1-410-509-11	INDUCTOR 10uH	
		< TRANSISTOR >	
Q501	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q502	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q503	8-729-924-90	TRANSISTOR 2SB1370-EF	
Q504	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q505	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q506	8-729-924-90	TRANSISTOR 2SB1370-EF	
Q507	8-729-900-80	TRANSISTOR DTC114ES	
Q509	8-729-900-80	TRANSISTOR DTC114ES	
Q510	8-729-801-84	TRANSISTOR 2SB1013-4	
Q511	8-729-801-93	TRANSISTOR 2SD1387	
Q512	8-729-900-80	TRANSISTOR DTC114ES	
Q514	8-729-900-80	TRANSISTOR DTC114ES	
Q515	8-729-801-84	TRANSISTOR 2SB1013-4	
Q516	8-729-801-93	TRANSISTOR 2SD1387-3	
Q517	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q518	8-729-924-90	TRANSISTOR 2SB1370-EF	
Q519	8-729-900-80	TRANSISTOR DTC114ES	
Q520	8-729-900-80	TRANSISTOR DTC114ES	
Q521	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q523	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q524	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q525	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q526	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q527	8-729-900-80	TRANSISTOR DTC114ES	
Q528	8-729-900-80	TRANSISTOR DTC114ES	
Q530	8-729-900-80	TRANSISTOR DTC114ES	
Q531	8-729-900-80	TRANSISTOR DTC114ES	
Q532	8-729-900-80	TRANSISTOR DTC114ES	
Q533	8-729-900-80	TRANSISTOR DTC114ES	
Q534	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q535	8-729-900-80	TRANSISTOR DTC114ES	
Q536	8-729-900-80	TRANSISTOR DTC114ES	
Q537	8-729-900-80	TRANSISTOR DTC114ES	
		< RESISTOR >	
R501	1-249-429-11	CARBON 10K 5% 1/4W	
R502	1-249-429-11	CARBON 10K 5% 1/4W	
R503	1-249-429-11	CARBON 10K 5% 1/4W	
R504	1-249-429-11	CARBON 10K 5% 1/4W	
R505	1-249-429-11	CARBON 10K 5% 1/4W	
R506	1-249-429-11	CARBON 10K 5% 1/4W	
R507	1-249-441-11	CARBON 100K 5% 1/4W	
R508	1-249-429-11	CARBON 10K 5% 1/4W	
R509	1-249-429-11	CARBON 10K 5% 1/4W	
⚠R510	1-249-417-11	CARBON 1K 5% 1/4W	F
⚠R511	1-249-417-11	CARBON 1K 5% 1/4W	F
⚠R512	1-249-405-11	CARBON 100 5% 1/4W	F
⚠R513	1-249-417-11	CARBON 1K 5% 1/4W	F
⚠R514	1-249-408-11	CARBON 180 5% 1/4W	F
R515	1-249-441-11	CARBON 100K 5% 1/4W	
R516	1-249-429-11	CARBON 10K 5% 1/4W	
⚠R517	1-249-417-11	CARBON 1K 5% 1/4W	F
R518	1-249-429-11	CARBON 10K 5% 1/4W	
⚠R519	1-249-417-11	CARBON 1K 5% 1/4W	F
⚠R520	1-249-405-11	CARBON 100 5% 1/4W	F
⚠R521	1-249-417-11	CARBON 1K 5% 1/4W	F
⚠R522	1-249-408-11	CARBON 180 5% 1/4W	F
R523	1-249-429-11	CARBON 10K 5% 1/4W	
R524	1-249-429-11	CARBON 10K 5% 1/4W	
R525	1-249-429-11	CARBON 10K 5% 1/4W	
R526	1-249-429-11	CARBON 10K 5% 1/4W	
R527	1-249-429-11	CARBON 10K 5% 1/4W	
R528	1-249-429-11	CARBON 10K 5% 1/4W	
⚠R529	1-249-409-11	CARBON 220 5% 1/4W	F
⚠R530	1-249-409-11	CARBON 220 5% 1/4W	F
⚠R531	1-249-409-11	CARBON 220 5% 1/4W	F
⚠R532	1-249-409-11	CARBON 220 5% 1/4W	F
⚠R533	1-249-417-11	CARBON 1K 5% 1/4W	F
R534	1-249-441-11	CARBON 100K 5% 1/4W	
⚠R535	1-249-423-11	CARBON 3.3K 5% 1/4W	F
⚠R536	1-249-417-11	CARBON 1K 5% 1/4W	F
R537	1-249-429-11	CARBON 10K 5% 1/4W	
R538	1-249-429-11	CARBON 10K 5% 1/4W	
⚠R539	1-249-419-11	CARBON 1.5K 5% 1/4W	F
⚠R540	1-249-407-11	CARBON 150 5% 1/4W	F
⚠R541	1-249-417-11	CARBON 1K 5% 1/4W	F
R542	1-249-482-11	CARBON 4.7 5% 1/2W	
⚠R543	1-249-424-11	CARBON 3.9K 5% 1/4W	F
R549	1-249-429-11	CARBON 10K 5% 1/4W	
⚠R550	1-249-417-11	CARBON 1K 5% 1/4W	F
R551	1-249-435-11	CARBON 33K 5% 1/4W	
R552	1-249-435-11	CARBON 33K 5% 1/4W	
⚠R553	1-249-423-11	CARBON 3.3K 5% 1/4W	F
⚠R554	1-249-423-11	CARBON 3.3K 5% 1/4W	F
⚠R555	1-249-417-11	CARBON 1K 5% 1/4W	F
R556	1-249-435-11	CARBON 33K 5% 1/4W	
R557	1-249-429-11	CARBON 10K 5% 1/4W	
⚠R558	1-249-417-11	CARBON 1K 5% 1/4W	F
R559	1-249-435-11	CARBON 33K 5% 1/4W	

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description				Remark
R560	1-249-435-11	CARBON	33K	5%	1/4W	
⚠R561	1-249-423-11	CARBON	3.3K	5%	1/4W	F
⚠R562	1-249-423-11	CARBON	3.3K	5%	1/4W	F
⚠R563	1-249-417-11	CARBON	1K	5%	1/4W	F
R564	1-249-435-11	CARBON	33K	5%	1/4W	
R565	1-249-429-11	CARBON	10K	5%	1/4W	
R567	1-247-804-11	CARBON	75	5%	1/4W	
R569	1-247-804-11	CARBON	75	5%	1/4W	
⚠R570	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R571	1-249-429-11	CARBON	10K	5%	1/4W	
R572	1-249-433-11	CARBON	22K	5%	1/4W	
⚠R573	1-249-425-11	CARBON	4.7K	5%	1/4W	F
⚠R574	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R575	1-249-429-11	CARBON	10K	5%	1/4W	
R576	1-249-433-11	CARBON	22K	5%	1/4W	
⚠R577	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R578	1-249-433-11	CARBON	22K	5%	1/4W	
R580	1-249-433-11	CARBON	22K	5%	1/4W	
R581	1-249-433-11	CARBON	22K	5%	1/4W	
R582	1-249-433-11	CARBON	22K	5%	1/4W	
R583	1-249-433-11	CARBON	22K	5%	1/4W	
⚠R584	1-249-425-11	CARBON	4.7K	5%	1/4W	F
⚠R585	1-249-425-11	CARBON	4.7K	5%	1/4W	F
⚠R586	1-249-425-11	CARBON	4.7K	5%	1/4W	F
⚠R587	1-249-417-11	CARBON	1K	5%	1/4W	F
⚠R588	1-249-417-11	CARBON	1K	5%	1/4W	F
⚠R589	1-249-425-11	CARBON	4.7K	5%	1/4W	F
⚠R590	1-249-425-11	CARBON	4.7K	5%	1/4W	F
⚠R591	1-249-425-11	CARBON	4.7K	5%	1/4W	F
⚠R592	1-249-425-11	CARBON	4.7K	5%	1/4W	F
⚠R594	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R595	1-249-433-11	CARBON	22K	5%	1/4W	
⚠R597	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R598	1-249-433-11	CARBON	22K	5%	1/4W	
R599	1-249-429-11	CARBON	10K	5%	1/4W	
⚠R600	1-249-409-11	CARBON	220	5%	1/4W	F
⚠R601	1-249-409-11	CARBON	220	5%	1/4W	F
⚠R602	1-249-413-11	CARBON	470	5%	1/4W	F
⚠R603	1-249-413-11	CARBON	470	5%	1/4W	F
⚠R604	1-249-409-11	CARBON	220	5%	1/4W	F
⚠R605	1-249-413-11	CARBON	470	5%	1/4W	F
⚠R606	1-249-417-11	CARBON	1K	5%	1/4W	F
⚠R609	1-249-425-11	CARBON	4.7K	5%	1/4W	F
⚠R611	1-249-421-11	CARBON	2.2K	5%	1/4W	F
⚠R612	1-249-417-11	CARBON	1K	5%	1/4W	F
R614	1-249-435-11	CARBON	33K	5%	1/4W	
R615	1-249-429-11	CARBON	10K	5%	1/4W	
⚠R616	1-249-421-11	CARBON	2.2K	5%	1/4W	F

Ref. No.	Part No.	Description				Remark
R617	1-249-429-11	CARBON	10K	5%	1/4W	
⚠R618	1-249-421-11	CARBON	2.2K	5%	1/4W	F
⚠R620	1-249-409-11	CARBON	220	5%	1/4W	F
⚠R621	1-249-409-11	CARBON	220	5%	1/4W	F
⚠R622	1-249-401-11	CARBON	47	5%	1/4W	F
⚠R623	1-249-409-11	CARBON	220	5%	1/4W	F
⚠R624	1-249-409-11	CARBON	220	5%	1/4W	F
R625	1-247-899-11	CARBON	680K	5%	1/4W	
⚠R627	1-249-425-11	CARBON	4.7K	5%	1/4W	F
⚠R628	1-249-417-11	CARBON	1K	5%	1/4W	F
R629	1-249-433-11	CARBON	22K	5%	1/4W	
⚠R630	1-249-425-11	CARBON	4.7K	5%	1/4W	F
⚠R631	1-249-415-11	CARBON	680	5%	1/4W	F
R632	1-249-439-11	CARBON	68K	5%	1/4W	
⚠R633	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R634	1-249-440-11	CARBON	82K	5%	1/4W	
⚠R635	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R636	1-249-440-11	CARBON	82K	5%	1/4W	
⚠R637	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R638	1-249-429-11	CARBON	10K	5%	1/4W	
⚠R639	1-249-417-11	CARBON	1K	5%	1/4W	F
⚠R640	1-249-417-11	CARBON	1K	5%	1/4W	F
⚠R641	1-249-424-11	CARBON	3.9K	5%	1/4W	F
R642	1-249-435-11	CARBON	33K	5%	1/4W	
R643	1-249-435-11	CARBON	33K	5%	1/4W	
⚠R644	1-249-417-11	CARBON	1K	5%	1/4W	F
R645	1-249-437-11	CARBON	47K	5%	1/4W	
R646	1-249-411-11	CARBON	330	5%	1/4W	
R647	1-249-437-11	CARBON	47K	5%	1/4W	
R648	1-249-439-11	CARBON	68K	5%	1/4W	
⚠R649	1-249-405-11	CARBON	100	5%	1/4W	F
⚠R650	1-249-417-11	CARBON	1K	5%	1/4W	F
⚠R651	1-249-401-11	CARBON	47	5%	1/4W	F
⚠R652	1-249-401-11	CARBON	47	5%	1/4W	F
⚠R656	1-249-417-11	CARBON	1K	5%	1/4W	F
⚠R657	1-249-401-11	CARBON	47	5%	1/4W	F
⚠R658	1-249-417-11	CARBON	1K	5%	1/4W	F
⚠R659	1-249-413-11	CARBON	470	5%	1/4W	F
⚠R660	1-249-413-11	CARBON	470	5%	1/4W	F
⚠R661	1-249-393-11	CARBON	10	5%	1/4W	F
R663	1-249-433-11	CARBON	22K	5%	1/4W	
⚠R664	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R665	1-249-441-11	CARBON	100K	5%	1/4W	
⚠R666	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R667	1-249-441-11	CARBON	100K	5%	1/4W	
R668	1-249-433-11	CARBON	22K	5%	1/4W	
R669	1-249-441-11	CARBON	100K	5%	1/4W	
R670	1-249-429-11	CARBON	10K	5%	1/4W	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

DIGITAL | DIODE | HP JACK | HP VOL | LINE FILTER | LOAD-SW | LOADING MOTOR

Ref. No.	Part No.	Description				Remark
⚠R672	1-249-407-11	CARBON	150	5%	1/4W	F
⚠R674	1-249-417-11	CARBON	1K	5%	1/4W	F
R675	1-249-429-11	CARBON	10K	5%	1/4W	
R676	1-249-441-11	CARBON	100K	5%	1/4W	
⚠R680	1-249-410-11	CARBON	270	5%	1/4W	F
⚠R681	1-249-405-11	CARBON	100	5%	1/4W	F
R682	1-249-433-11	CARBON	22K	5%	1/4W	
R683	1-249-433-11	CARBON	22K	5%	1/4W	
R684	1-249-429-11	CARBON	10K	5%	1/4W	
		< VARIABLE RESISTOR >				
RV501	1-238-019-11	RES, ADJ, CARBON 47K				
RV502	1-238-019-11	RES, ADJ, CARBON 47K				
RV503	1-238-016-11	RES, ADJ, CARBON 10K				
RV504	1-238-016-11	RES, ADJ, CARBON 10K				
RV505	1-238-015-11	RES, ADJ, CARBON 4.7K				
RV506	1-238-015-11	RES, ADJ, CARBON 4.7K				
		< RELAY >				
RY518	1-515-640-11	RELAY (5V)				
		< VIBRATOR >				
X501	1-567-816-11	VIBRATOR, CRYSTAL 18.8MHz				
X502	1-567-815-11	VIBRATOR, CRYSTAL 22.6MHz				
X503	1-578-667-11	VIBRATOR, CRYSTAL 49.1MHz				
**********						
*	1-637-625-11	DIODE BOARD				
		**********				
		< DIODE >				
D901	8-719-302-38	DIODE RBV-602-01				
**********						
*	1-637-614-11	HP JACK BOARD				
		**********				
	1-136-165-00	FILM	0.1MF	5%	50V	
		< JACK >				
J721	1-565-327-11	JACK, LARGE TYPE 1P (PHONES)				
		< CAPACITOR >				
C720	1-162-290-31	CERAMIC	470PF	10%	50V	
C721	1-162-290-31	CERAMIC	470PF	10%	50V	
**********						

Ref. No.	Part No.	Description				Remark
*	1-637-613-11	HP VOL BOARD				
		**********				
		< VARIABLE RESISTOR >				
RV302	1-238-841-11	RES, VAR, CARBON 20K/20K (PHONE LEVEL)				
**********						
*	1-637-621-11	LINE FILTER BOARD				
		**********				
*	1-533-213-31	HOLDER, FUSE				
	4-870-539-00	PLATE, GROUND				
		< CAPACITOR >				
⚠C941	1-161-744-00	CERAMIC	0.01uF		400V	
⚠C942	1-161-742-00	CERAMIC	0.0022uF	20%	400V	
⚠C943	1-161-742-00	CERAMIC	0.0022uF	20%	400V	
⚠C944	1-161-742-00	CERAMIC	0.0022uF	20%	400V	
⚠C945	1-161-742-00	CERAMIC	0.0022uF	20%	400V	
⚠C946	1-161-744-00	CERAMIC	0.01uF		400V	
		< CONNECTOR >				
* CN941	1-564-321-00	PIN, CONNECTOR 2P				
* CN942	1-565-395-11	PIN, CONNECTOR 3P				
* CN943	1-564-687-11	PIN, CONNECTOR 3P				
* CN944	1-564-687-11	PIN, CONNECTOR 3P				
		< FUSE >				
⚠FH941	1-532-203-00	FUSE, TIME-LAG 2A/250V (AEP, UK)				
⚠FH941	1-532-743-11	FUSE, GLASS TUBE 2A/125V (US, Canadian)				
		< TRANSFORMER >				
⚠T901	1-421-915-11	COIL, LINE FILTER				
**********						
*	1-637-606-11	LOAD-SW BOARD				
		**********				
		< SWITCH >				
S011	1-571-489-11	SWITCH, SLIDE (UNLOAD)				
S012	1-571-489-11	SWITCH, SLIDE (LOAD)				
**********						
*	1-637-601-11	LOADING MOTOR BOARD				
		**********				
		< CAPACITOR >				
C011	1-163-038-00	CERAMIC CHIP	0.1uF		25V	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

LOADING MOTOR | MD | OPTICAL RECEIVE | POWER

Ref. No.	Part No.	Description				Remark
		< CONNECTOR >				
* CN001	1-564-497-11	PIN, CONNECTOR 4P				
* CN002	1-564-496-11	PIN, CONNECTOR 3P				
* CN054	1-564-523-11	PLUG, CONNECTOR 8P				
		< MOTOR >				
MOT001	A-2003-660-1	LOADING MOTOR ASSY (LOADING)				
**********						
*	A-2006-382-A	MD BOARD, COMPLETE				
		**********				
	1-216-296-00	METAL CHIP	0	5%	1/8W	
	4-352-844-01	PIN, LEAD, COATING				
		< CAPACITOR >				
C001	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C002	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C003	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C004	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C005	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C006	1-124-126-00	ELECT	47uF	20%	10V	
C007	1-124-126-00	ELECT	47uF	20%	10V	
C021	1-124-925-11	ELECT	2.2uF	20%	100V	
C022	1-124-126-00	ELECT	47uF	20%	10V	
C031	1-124-126-00	ELECT	47uF	20%	10V	
C032	1-124-126-00	ELECT	47uF	20%	10V	
C033	1-124-126-00	ELECT	47uF	20%	10V	
		< CONNECTOR >				
* CN003	1-564-505-11	PLUG, CONNECTOR 2P				
* CN004	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P				
* CN005	1-564-515-11	PLUG, CONNECTOR 12P				
* CN006	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P				
* CN007	1-568-369-11	HOUSING, CONNECTOR(PC BOARD) 8P				
* CN008	1-564-338-00	PIN, CONNECTOR 4P				
* CN009	1-564-338-61	PIN, CONNECTOR 4P				
* CN051	1-564-715-11	PIN, CONNECTOR (SMALL TYPE)13P				
* CN052	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P				
* CN053	1-564-507-11	PLUG, CONNECTOR 4P				
		< DIODE >				
D011	8-719-104-34	DIODE	1S2836			
D012	8-719-104-34	DIODE	1S2836			
		< IC >				
IC001	8-759-107-68	IC	CX20115A			
IC002	8-759-502-80	IC	LM358M			

Ref. No.	Part No.	Description				Remark
		< TRANSISTOR >				
Q001	8-729-100-66	TRANSISTOR	2SC1623			
Q002	8-729-101-07	TRANSISTOR	2SB798-DL			
Q003	8-729-900-53	TRANSISTOR	DTC114EK			
		< RESISTOR >				
R001	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R002	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R003	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R004	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R005	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R006	1-216-058-00	METAL GLAZE	2.4K	5%	1/10W	
R007	1-216-029-00	METAL CHIP	150	5%	1/10W	
R008	1-216-059-00	METAL CHIP	2.7K	5%	1/10W	
R009	1-216-025-00	METAL CHIP	100	5%	1/10W	
R010	1-216-084-00	METAL CHIP	30K	5%	1/10W	
R011	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R012	1-216-075-00	METAL CHIP	12K	5%	1/10W	
R013	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R014	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R015	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R022	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R023	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R024	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R025	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R031	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R032	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R033	1-216-063-00	METAL CHIP	3.9K	5%	1/10W	
R034	1-216-063-00	METAL CHIP	3.9K	5%	1/10W	
R035	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R036	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R037	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R038	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
**********						
*	1-637-609-11	OPTICAL RECEIVE BOARD				
		**********				
		< CAPACITOR >				
C718	1-124-779-00	ELECT CHIP	10uF	20%	16V	
		< IC >				
IC711	8-749-920-59	IC	A1QH3020S			
**********						
*	A-2006-626-A	POWER BOARD, COMPLETE				
		**********				
*	1-533-213-31	HOLDER, FUSE				

POWER | PUSH SW

Ref. No.	Part No.	Description			Remark
*	1-568-130-11	BAR, BUS 3P			
		< CAPACITOR >			
C901	1-126-016-11	ELECT	4700uF	20%	16V
C902	1-126-016-11	ELECT	4700uF	20%	16V
C903	1-124-999-11	ELECT	2200uF	20%	10V
C904	1-124-994-11	ELECT	100uF	20%	10V
C905	1-124-473-11	ELECT	1000uF	20%	10V
C906	1-124-473-11	ELECT	1000uF	20%	10V
C907	1-126-059-11	ELECT	10uF	20%	50V
C908	1-126-016-11	ELECT	4700uF	20%	16V
C909	1-126-939-11	ELECT	10000uF	20%	16V
C910	1-124-473-11	ELECT	1000uF	20%	10V
C911	1-126-066-11	ELECT	470uF	20%	63V
C912	1-126-052-11	ELECT	100uF	20%	50V
C913	1-126-052-11	ELECT	100uF	20%	50V
C914	1-136-165-00	FILM	0.1uF	5%	50V
C915	1-136-165-00	FILM	0.1uF	5%	50V
C991	1-126-129-11	ELECT	6800uF	20%	35V
C992	1-126-129-11	ELECT	6800uF	20%	35V
C993	1-136-165-00	FILM	0.1uF	5%	50V
C994	1-136-177-00	FILM	1uF	5%	50V
C995	1-136-165-00	FILM	0.1uF	5%	50V
C996	1-136-177-00	FILM	1uF	5%	50V
		< CONNECTOR >			
* CN901	1-564-506-11	PLUG, CONNECTOR 3P			
* CN902	1-564-506-11	PLUG, CONNECTOR 3P			
* CN903	1-564-506-11	PLUG, CONNECTOR 3P			
CN904	1-564-507-11	PLUG, CONNECTOR 4P			
* CN991	1-560-061-00	PIN, CONNECTOR 3P			
* CN992	1-560-062-00	PIN, CONNECTOR 4P			
* CN993	1-560-063-00	PIN, CONNECTOR 5P			
* CN994	1-560-061-00	PIN, CONNECTOR 3P			
		< DIODE >			
D903	8-719-200-77	DIODE	10E2N		
D904	8-719-200-77	DIODE	10E2N		
D905	8-719-107-94	DIODE	1SS202-1		
D906	8-719-107-94	DIODE	1SS202-1		
D907	8-719-107-94	DIODE	1SS202-1		
D908	8-719-230-02	DIODE	30DF2		
D909	8-719-230-02	DIODE	30DF2		
D910	8-719-200-77	DIODE	10E2N		
D991	8-719-210-30	DIODE	F10P20F(R)		
D992	8-719-210-38	DIODE	F10P20FR		

Ref. No.	Part No.	Description				Remark
		< FUSE >				
⚠FH901	1-532-237-00	FUSE, TIME-LAG (BET) 3.15A/250V (AEP, UK)				
⚠FH901	1-532-745-11	FUSE, GLASS TUBE 3.15A/125V (US, Canadian)				
⚠FH902	1-532-203-00	FUSE, TIME-LAG 2A/250V (AEP, UK)				
⚠FH902	1-532-743-11	FUSE, GLASS TUBE 2A/125V (US, Canadian)				
⚠FH903	1-532-203-00	FUSE, TIME-LAG 2A/250V (AEP, UK)				
⚠FH903	1-532-743-11	FUSE, GLASS TUBE 2A/125V (US, Canadian)				
		< RESISTOR >				
⚠FR901	1-219-137-11	FUSIBLE	0.33	10%	1/4W	
⚠FR902	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
⚠FR904	1-212-865-00	FUSIBLE	22	5%	1/4W	F
⚠FR905	1-212-865-00	FUSIBLE	22	5%	1/4W	F
		< TRANSISTOR >				
Q901	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q902	8-729-209-15	TRANSISTOR	2SD2012			
		< RESISTOR >				
⚠R901	1-249-425-11	CARBON	4.7K	5%	1/4W	F
⚠R902	1-249-423-11	CARBON	3.3K	5%	1/4W	F
⚠R903	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R904	1-249-437-11	CARBON	47K	5%	1/4W	
R905	1-247-887-00	CARBON	220K	5%	1/4W	
⚠R907	1-249-409-11	CARBON	220	5%	1/4W	F
		< THERMISTOR >				
TH903	1-806-882-11	THERMISTOR, POSITIVE				
		< THERMISTOR(POSITIVE) >				
THP901	1-808-065-11	THERMISTOR, POSITIVE				
THP902	1-808-065-11	THERMISTOR, POSITIVE				
		< DIODE >				
ZD901	8-719-914-12	DIODE	HZ4BLL			
ZD902	8-719-934-25	DIODE	HZS33-1L			
ZD903	8-719-933-33	DIODE	HZS6A1L			
*	1-637-610-11	PUSH SW BOARD				
		**********				
		< CONNECTOR >				
* CN778	1-564-337-00	PIN, CONNECTOR 3P				
		< SWITCH >				
S747	1-554-118-00	SWITCH, PUSH (1 KEY) (REC MODE)				

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

PUSH SW | REC VOL | REM-8P

Ref.No.	Part No.	Description			Remark
S750	1-572-865-11	SWITCH, PUSH (INPUT MONITOR)			
**********					
*	1-637-615-11	REC VOL BOARD			
		**********			
		< CONNECTOR >			
* CN224	1-564-507-11	PLUG, CONNECTOR 4P			
		< RESISTOR >			
R101	1-249-459-11	CARBON	12K	5% 1/4W	
R102	1-249-461-11	CARBON	18K	5% 1/4W	
R201	1-249-459-11	CARBON	12K	5% 1/4W	
R202	1-249-461-11	CARBON	18K	5% 1/4W	
		< VARIABLE RESISTOR >			
RV301	1-241-360-11	RES, VAR, CARBON 50K/50K (INPUT LEVEL)			
**********					
*	A-2006-825-A	REM-8P BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C001	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C002	1-164-346-11	CERAMIC CHIP	1uF		16V
C003	1-164-346-11	CERAMIC CHIP	1uF		16V
C004	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C005	1-164-346-11	CERAMIC CHIP	1uF		16V
C006	1-164-346-11	CERAMIC CHIP	1uF		16V
C007	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C008	1-164-346-11	CERAMIC CHIP	1uF		16V
C009	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C010	1-126-133-11	ELECT	100uF	20%	6.3V
C011	1-163-038-00	CERAMIC CHIP	0.1uF		25V
		< CONNECTOR >			
* CN001	1-564-337-00	PIN, CONNECTOR 3P			
		< DIODE >			
D001	8-719-800-76	DIODE	1SS226		
D002	8-719-800-76	DIODE	1SS226		
D003	8-719-800-76	DIODE	1SS226		
D004	8-719-800-76	DIODE	1SS226		
		< IC >			
IC001	8-759-009-51	IC	MC14538BF		
IC002	8-759-009-51	IC	MC14538BF		
IC003	8-759-925-72	IC	SN74HC02ANS		
IC004	8-759-927-46	IC	SN74HC00ANS		
IC005	8-759-925-80	IC	SN74HC14ANS		
IC006	8-759-100-93	IC	uPC393G2		
		< CONNECTOR >			
J001	1-563-508-11	CONNECTOR, DIN 8P (REMOTE 8P)			
		< TRANSISTOR >			
Q001	8-729-216-22	TRANSISTOR	2SA1162-G		
Q002	8-729-216-22	TRANSISTOR	2SA1162-G		
Q003	8-729-100-66	TRANSISTOR	2SC1623-L6		
Q004	8-729-100-66	TRANSISTOR	2SC1623-L6		
		< RESISTOR >			
R001	1-216-069-00	METAL CHIP	6.8K	5% 1/10W	
R002	1-216-069-00	METAL CHIP	6.8K	5% 1/10W	
R003	1-216-069-00	METAL CHIP	6.8K	5% 1/10W	
R004	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R005	1-216-097-00	METAL CHIP	100K	5% 1/10W	
R006	1-216-097-00	METAL CHIP	100K	5% 1/10W	
R007	1-216-069-00	METAL CHIP	6.8K	5% 1/10W	
R008	1-216-069-00	METAL CHIP	6.8K	5% 1/10W	
R009	1-216-069-00	METAL CHIP	6.8K	5% 1/10W	
R010	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R011	1-216-097-00	METAL CHIP	100K	5% 1/10W	
R012	1-216-097-00	METAL CHIP	100K	5% 1/10W	
R013	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R014	1-216-051-00	METAL CHIP	1.2K	5% 1/10W	
R015	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R016	1-216-051-00	METAL CHIP	1.2K	5% 1/10W	
R017	1-216-101-00	METAL CHIP	150K	5% 1/10W	
R018	1-216-097-00	METAL CHIP	100K	5% 1/10W	
R019	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R020	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R021	1-216-051-00	METAL CHIP	1.2K	5% 1/10W	
R022	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R023	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R024	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R025	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R026	1-216-073-00	METAL CHIP	10K	5% 1/10W	
		< SWITCH >			
S001	1-570-707-21	SWITCH, SLIDE (MODE)			
**********					

RF AMP (PB) RF AMP (REC/PB)

Ref. No.	Part No.	Description			Remark
*	A-2006-207-A	RF AMP (PB) BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C51	1-124-779-00	ELECT CHIP	10uF	20%	16V
C52	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C53	1-162-638-11	CERAMIC CHIP	1uF		16V
C54	1-164-299-11	CERAMIC CHIP	0.22uF	10%	25V
C55	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C57	1-124-779-00	ELECT CHIP	10uF	20%	16V
C58	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C59	1-164-299-11	CERAMIC CHIP	0.22uF	10%	25V
C60	1-162-638-11	CERAMIC CHIP	1uF		16V
C61	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C62	1-124-779-00	ELECT CHIP	10uF	20%	16V
C63	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C64	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C66	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C69	1-124-779-00	ELECT CHIP	10uF	20%	16V
C70	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C71	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C72	1-163-038-00	CERAMIC CHIP	0.1uF		25V
*		< CONNECTOR >			
CN51	1-569-349-11	CONNECTOR, F.P.C 6P			
CN52	1-564-725-11	PIN, CONNECTOR (SMALL TYPE) 9P			
		< IC >			
IC51	8-752-039-01	IC CXA1364R			
		< COIL >			
L51	1-408-781-00	INDUCTOR CHIP	22uH		
L52	1-408-789-21	INDUCTOR CHIP	100uH		
L53	1-408-781-00	INDUCTOR CHIP	22uH		
		< TRANSISTOR >			
Q51	8-729-901-01	TRANSISTOR	DTC144EK		
Q52	8-729-901-01	TRANSISTOR	DTC144EK		
Q53	8-729-901-01	TRANSISTOR	DTC144EK		
Q54	8-729-901-01	TRANSISTOR	DTC144EK		
Q55	8-729-901-01	TRANSISTOR	DTC144EK		
		< RESISTOR >			
R51	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R52	1-216-077-00	METAL CHIP	15K	5%	1/10W
R53	1-216-077-00	METAL CHIP	15K	5%	1/10W
R54	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R55	1-216-083-00	METAL CHIP	27K	5%	1/10W
R56	1-216-089-00	METAL CHIP	47K	5%	1/10W
R57	1-216-084-00	METAL CHIP	30K	5%	1/10W
R58	1-216-085-00	METAL CHIP	33K	5%	1/10W
R59	1-216-085-00	METAL CHIP	33K	5%	1/10W
R60	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R61	1-216-075-00	METAL CHIP	12K	5%	1/10W
R62	1-216-077-00	METAL CHIP	15K	5%	1/10W
R63	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
**********					
*	A-2006-206-A	RF AMP (REC/PB) BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C951	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C953	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C954	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C955	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C956	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C957	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C958	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C959	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C960	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C961	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C962	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C963	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C965	1-164-298-11	CERAMIC CHIP	0.15uF	10%	25V
C966	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C967	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C968	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C969	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C971	1-164-298-11	CERAMIC CHIP	0.15uF	10%	25V
C973	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C974	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C975	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C976	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C977	1-163-020-00	CERAMIC CHIP	0.0082uF	10%	50V
C978	1-162-638-11	CERAMIC CHIP	1uF		16V
C979	1-163-020-00	CERAMIC CHIP	0.0082uF	10%	50V
C980	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C981	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C982	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C983	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C984	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C985	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
		< CONNECTOR >			
CN951	1-569-349-11	CONNECTOR, F.P.C 6P			
* CN952	1-564-728-11	PIN, CONNECTOR (SMALL TYPE)12P			

RF AMP (REC/PB) S-END S-SW SLIDE SW T-END T-SW TR-A TR-B

Ref. No.	Part No.	Description			Remark
		< IC >			
IC951	8-752-032-26	IC CXA1045Q			
		< COIL >			
L951	1-408-777-00	INDUCTOR CHIP	10uH		
L952	1-408-791-00	INDUCTOR CHIP	150uH		
L953	1-408-791-00	INDUCTOR CHIP	150uH		
		< RESISTOR >			
R951	1-216-056-00	METAL GLAZE	2K	5% 1/10W	
R952	1-216-056-00	METAL GLAZE	2K	5% 1/10W	
R953	1-216-057-00	METAL CHIP	2.2K	5% 1/10W	
R954	1-216-057-00	METAL CHIP	2.2K	5% 1/10W	
R955	1-216-089-00	METAL CHIP	47K	5% 1/10W	
R956	1-216-083-00	METAL CHIP	27K	5% 1/10W	
R957	1-216-063-00	METAL CHIP	3.9K	5% 1/10W	
R958	1-216-085-00	METAL CHIP	33K	5% 1/10W	
R959	1-216-067-00	METAL CHIP	5.6K	5% 1/10W	
R960	1-216-079-00	METAL CHIP	18K	5% 1/10W	
R961	1-216-079-00	METAL CHIP	18K	5% 1/10W	
R962	1-216-067-00	METAL CHIP	5.6K	5% 1/10W	
R963	1-216-085-00	METAL CHIP	33K	5% 1/10W	
R964	1-216-083-00	METAL CHIP	27K	5% 1/10W	
R965	1-216-063-00	METAL CHIP	3.9K	5% 1/10W	
R966	1-216-089-00	METAL CHIP	47K	5% 1/10W	
R967	1-216-089-00	METAL CHIP	47K	5% 1/10W	
R968	1-216-089-00	METAL CHIP	47K	5% 1/10W	
R969	1-216-075-00	METAL CHIP	12K	5% 1/10W	
R970	1-216-082-00	METAL GLAZE	24K	5% 1/10W	
R971	1-216-689-11	METAL CHIP	39K	0.5% 1/10W	
R972	1-216-295-00	METAL CHIP	0	5% 1/10W	
R973	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R974	1-216-073-00	METAL CHIP	10K	5% 1/10W	
		< VARIABLE RESISTOR >			
RV951	1-238-237-11	RES, ADJ, CERMET 470			
RV952	1-238-237-11	RES, ADJ, CERMET 470			
**********					
*	1-637-602-11	S-END BOARD			
		**********			
		< CONNECTOR >			
* CN055	1-564-518-11	PLUG, CONNECTOR 3P			
		< TRANSISTOR >			
Q012	1-808-957-11	TRANSISTOR PHOTO SENSOR			
**********					

Ref. No.	Part No.	Description			Remark
*	1-637-604-11	S-SW BOARD			
		**********			
		< SWITCH >			
S014	1-572-458-11	SWITCH, PUSH (THICK DET/METAL DET)			
**********					
*	1-637-608-11	SLIDE SW BOARD			
		**********			
		< RESISTOR >			
R807	1-216-057-00	METAL CHIP	2.2K	5% 1/10W	
R808	1-216-057-00	METAL CHIP	2.2K	5% 1/10W	
		< SWITCH >			
S746	1-516-781-XX	SWITCH, SLIDE (INPUT MODE)			
S749	1-516-781-XX	SWITCH, SLIDE (REMOTE)			
**********					
*	1-637-603-11	T-END BOARD			
		**********			
		< TRANSISTOR >			
Q011	1-808-957-11	TRANSISTOR PHOTO SENSOR			
**********					
*	1-637-605-11	T-SW BOARD			
		**********			
		< SWITCH >			
S015	1-572-459-11	SWITCH, PUSH (CASSETTE IN/REC PROOF/RECOGNITION)			
**********					
*	1-637-622-11	TR-A BOARD			
		**********			
		< CAPACITOR >			
C931	1-162-294-31	CERAMIC	0.001uF	10% 50V	
		< TRANSISTOR >			
Q931	8-729-209-15	TRANSISTOR 2SD2012			
**********					
*	1-637-623-11	TR-B BOARD			
		**********			
		< CAPACITOR >			
C932	1-164-159-11	CERAMIC	0.1uF	50V	
C933	1-164-159-11	CERAMIC	0.1uF	50V	

Ref. No.	Part No.	Description	Remark
		< IC >	
IC901	8-759-148-79	IC uPC2406HF	
**********			
*	1-637-624-11	TR-C BOARD	
		**********	
		< CAPACITOR >	
C934	1-164-159-11	CERAMIC 0.1uF	50V
C935	1-164-159-11	CERAMIC 0.1uF	50V
		< IC >	
IC902	8-759-144-82	IC uPC2405HF	
**********			
		MISCELLANEOUS	
		*************	
⚠122	1-580-375-21	INLET 3P	
131	1-555-724-00	WIRE, GROUND	
307	8-848-549-11	DRUM ASSY DOU-15A	
⚠BATT01	1-528-229-11	BATTERY, LITHIUMCR-2450	
⚠FH901	1-532-237-00	FUSE, TIME-LAG (BET) 3.15A/250V (AEP, UK)	
⚠FH901	1-532-745-11	FUSE, GLASS TUBE 3.15A/125V (US, Canadian)	
⚠FH902	1-532-203-00	FUSE, TIME-LAG 2A/250V (AEP, UK)	
⚠FH902	1-532-743-11	FUSE, GLASS TUBE 2A/125V (US, Canadian)	
⚠FH903	1-532-203-00	FUSE, TIME-LAG 2A/250V (AEP, UK)	
⚠FH903	1-532-743-11	FUSE, GLASS TUBE 2A/125V (US, Canadian)	
⚠FH941	1-532-203-00	FUSE, TIME-LAG 2A/250V (AEP, UK)	
⚠FH941	1-532-743-11	FUSE, GLASS TUBE 2A/125V (US, Canadian)	
M902	8-835-306-01	MOTOR, DC U-17A (CAPSTAN)	
M905	8-835-205-01	MOTOR, DC U-2A (REEL)	
MOT011	A-2003-660-A	MOTOR ASSY (LOADING)	
MOT012	A-2003-448-A	MOTOR ASSY (CASSETTE COMPARTMENT)	
PL701	1-518-664-11	LAMP, PILOT	
PL702	1-518-664-11	LAMP, PILOT	
PM002	1-454-522-11	SOLENOID, PLUNGER	
⚠PT901	1-423-341-11	TRANSFORMER, POWER (D) (US, Canadian)	
⚠PT901	1-423-342-11	TRANSFORMER, POWER (D) (AEP, UK)	
⚠PT902	1-450-449-11	TRANSFORMER, POWER (A) (US, Canadian)	
⚠PT902	1-450-604-11	TRANSFORMER, POWER (A) (AEP, UK)	
⚠S901	1-554-920-11	SWITCH, PUSH (AC POWER) (1 KEY)	
**********			
		ACCESSORIES & PACKING MATERIALS	
		********************************	
	1-465-859-11	REMOTE COMMANDER (RM-2700)	
⚠	1-557-377-11	CORD, POWER (US, Canadian)	
⚠	1-590-910-11	CORD SET, POWER (AEP, UK)	
	2-297-913-00	WASHER (DIA.5), ORNAMENTAL	
*	3-370-497-01	CUSHION	
*	3-382-129-01	INDIVIDUAL CARTON	
	3-707-584-01	COVER, BATTERY (FOR RM-2700)	
	3-755-358-01	MANUAL, OPERATION (ENGLISH, FRENCH) (US, Canadian)	
	3-755-359-01	MANUAL, OPERATION (ENGLISH, FRENCH, GERMAN) (AEP, UK)	
	4-933-446-01	SCREW (SIDE PANEL)	
*	4-936-624-01	CUSHION	
	7-682-276-04	SCREW +RK 5X12	
**********			
		**************************	
		HARDWARE LIST	
		**************************	
#1	7-621-259-39	SCREW +P 2.6X5	
#2	7-682-548-09	SCREW, LOCK, +P 3X8	
#3	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
#4	7-621-773-86	SCREW +B 2.6X4	
#5	7-682-560-04	SCREW +BVTT 4X6 (S)	
#6	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#7	7-682-548-04	SCREW, TIGHT, S	
#8	7-623-508-01	LUG, 3	
#9	7-682-147-15	SCREW, TR	
#10	7-621-772-10	SCREW +B 2X4	
#11	7-682-547-04	SCREW +BVTT 3X6 (S)	
#12	7-682-545-09	SCREW +B 3X4	
#13	7-621-772-00	SCREW +B 2X3	
#14	7-688-001-12	W 2, MIDDLE	
#15	7-621-775-08	SCREW +B 2.6X3	
#16	7-621-255-45	SCREW +P 2X6	
#17	7-627-852-28	+P 1.7X3	
#18	7-621-772-08	SCREW +B 2X3	
#19	7-628-253-00	SCREW +PS 2X4	
#20	7-627-553-27	SCREW, PRECISION +P 2X2.5	
#21	7-627-553-67	SCREW, PRECISION +P 2X5	
#22	7-621-772-20	SCREW +B 2X5	
#23	7-627-450-78	SCREW, PRECISION +K 1.7X4	
#24	7-627-552-47	SCREW, PRECISION +P 1.7X4	
#25	7-621-759-35	+PSW 2.6X5	
#26	7-621-775-10	SCREW +B 2.6X4	
#27	7-682-660-09	SCREW +PS 4X6	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

9-957-431-11

Sony Corporation
Audio Group

English
92J1820-1
Printed in Japan

Published by Audio Corporate Planning Group

PCM-2700A

SONY

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model

CORRECTION

Correct your service manual as shown below.

____ (Under line) : indicates corrected portion.

Page	INCORRECT			CORRECT		
	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
103	312	3-701-437-01	SHEET (CATCHER)	312	3-364-033-01	SHEET (CATCHER)

(SPM-95058)

9-957-431-91

Sony Corporation
Consumer A&V Products Company
Home A&V Products Div.

English
95K0410-1D
Printed in Japan

Published by Home A&V Products Div.
Quality Engineering Dept.